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Part III

Department of the Interior

Fish and Wildlife Service

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50 CFR Part 17

Endangered and Threatened Wildlife and Plants; Mexican Spotted Owl;
Proposed Rule
DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

RIN 1018-AD02

Endangered and Threatened Wildlife and Plants; Proposed

Determination of Critical Habitat for the Mexican Spotted Owl

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service (Service) proposes to designate critical habitat for the Mexican spotted owl (Strix occidentalis lucida), a subspecies federally listed as threatened under the Endangered Species Act of 1973, as amended (Act). A total of 1,931,264 hectares (ha) (4,770,223 acres) of critical habitat is proposed. This proposed critical habitat designation, if made final, would provide additional protection requirements under section 7 of the Act with regard to activities that are funded, authorized, or carried out by any Federal agency. As information is received by the Service from the Indian Tribal Governments, the Mexican Spotted Owl Recovery Team (Team), Federal and State agencies, and the general public, revisions may be made to this proposal to incorporate that new information. In addition, section 4 of the Act requires the Service to consider economic impact and any other relevant impacts prior to making a final decision on the size and scope of critical habitat. An economic analysis is currently being prepared and notice of its availability will be published in the Federal Register and local newspapers.

DATES: Comments will be accepted until March 7, 1995. The Service will hold public hearings on this proposed rule; dates and specific locations for these hearings will be published in the Federal Register and local newspapers at least 15 days prior to the first hearing.

ADDRESSES: The complete administrative record for this rule is on file at the U.S. Fish and Wildlife Service, New Mexico Ecological Services State Office, 2105 Osuna NE., Albuquerque, New Mexico 87113. The complete file for this rule will be available for public inspection, by appointment, during normal business hours at the above address.

FOR FURTHER INFORMATION CONTACT: Jennifer Fowler-Propst, State Supervisor, at the above address (505/883-7877).

SUPPLEMENTARY INFORMATION:

Summary of Proposed Action

This rule proposes to designate critical habitat on certain lands

in Arizona, New Mexico, Utah, and Colorado, which now provide habitat or may provide habitat for the Mexican spotted owl, and that are managed for timber harvest. The Team has developed a draft Recovery Plan that identifies commercial timber harvest as the main management regime presenting a threat to Mexican spotted owl habitat.

On February 14, 1994, certain environmental groups and an individual filed a lawsuit in Federal District Court in Arizona against the Department of the Interior for failure to designate critical habitat for the Mexican spotted owl. Dr. Robin Silver, et al. v. Bruce Babbit, et al., CIV-94-0337-PHX-CAM. On October 6, 1994, the Court ordered the Service to, ``publish a proposed designation of critical habitat, including economic exclusion pursuant to 16 U.S.C. Sec. 1533(b)(2), no later than December 1, 1994, * * * [and] publish its final designation of critical habitat, following the procedure required by statute and Federal regulations for notice and comment, no later than May 27, 1995." The Service plans to review the information which has been assembled and analyzed by the Team as it makes final determination about designation of critical habitat. It is anticipated that the draft recovery plan will be available for public review and comment in December 1994.

The Service is also pursuing conservation agreements and management programs with various Indian Tribal Governments and the U.S. Forest Service. If agreements can be reached and implementation ensured so that special management consideration or protection is not necessary, the Service may consider excluding those areas from critical habitat. Such management agreements should include commitments to implementation of the recovery plan for the species or equivalent protection.

Background

The Mexican spotted owl is a medium-sized bird ranging from parts of central Colorado and Utah, south through Arizona, New Mexico, and western Texas, then south through Mexico to the States of Michoacan and Puebla. Mexican spotted owl habitat typically consists of dense, multi-storied, montane forests with closed canopies, and deep, cool, fractured canyons. The Mexican spotted owl is threatened by destruction and modification of habitat caused by even-aged timber harvest methods and wildfires, and decreased habitat suitability and potential increased predation associated with habitat fragmentation.

Previous Federal Actions

The entire spotted owl species (Strix occidentalis) was classified on the Service's 1989 Animal Notice of Review (54 FR 554; January 6, 1989) as a category 2 species. A category 2 species is one for which

listing may be appropriate, but for which additional biological information is needed to support a proposed rule. The northern spotted owl subspecies (S. o. caurina) was listed as a threatened species on June 26, 1990 (55 FR 26194), and its critical habitat was designated on January 15, 1992 (57 FR 1796). The California spotted owl subspecies (S. o. occidentalis) remains a category 2 candidate.

On December 22, 1989, the Service received a petition submitted by Dr. Robin D. Silver requesting the listing of the Mexican spotted owl as an endangered or threatened species under the Act. On February 27, 1990, the Service found that the petition presented substantial information indicating that listing may be warranted and initiated a status review. In conducting its review, the Service published a notice in the Federal Register (55 FR 11413) on March 28, 1990, requesting public comments and biological data on the status of the Mexican spotted owl. On December 6, 1990, the Mexican Spotted Owl Status Review Team completed a draft report, and on February 20, 1991, the Service made a finding, based on the contents of the report, that listing the Mexican spotted owl pursuant to section 4(b)(3)(B)(i) of the Act was warranted. Notice of this finding was published in the Federal Register on April 11, 1991 (56 FR 14678). A proposed rule to list the Mexican spotted owl as threatened without critical habitat was published in the Federal Register on November 4, 1991 (56 FR 56344).

In the November 4, 1991, proposed rule and associated notifications, all interested parties were requested to submit factual reports or information that might bear on whether the Mexican spotted owl should be listed. The comment period was reopened from May 11, 1992, to September 1, 1992 (57 FR 20073; May 11, 1992) to allow submission of additional comments. Appropriate State agencies, county governments, Federal agencies, scientific organizations, and other interested parties were directly contacted and requested to comment, and newspaper notices inviting public comment were published in Arizona, New Mexico, Utah, and Colorado. The Service held six public hearings, which were announced in the proposed rule. A notice of the hearing dates and locations was published in the Federal Register on January 2, 1992 (57 FR 35), and in notices published in Arizona, New Mexico, Utah, and Colorado newspapers. Interested parties were directly contacted and notified of the hearings.

After a review of all comments received in response to the proposed rule, the Service published a final rule to list the Mexican spotted owl as a threatened species on March 16, 1993 (58 FR 14248). Section 4(a)(3) of the Act requires that, to the maximum extent prudent and determinable, the Secretary designate critical habitat at the time a species is determined to be endangered or threatened. The Service's regulations (50 CFR 424.12(a)(2)) state that critical habitat is not determinable if information sufficient to perform required analyses of

the impacts of the designation is lacking or if the biological needs of the species are not sufficiently well known to permit identification of an area as critical habitat. At the time of listing, the Service found that, although considerable knowledge of Mexican spotted owl habitat needs had been gathered in recent years, habitat maps in sufficient detail to accurately delineate these areas were not available. Subsequent to listing, the Service began gathering the data necessary to develop this proposed rule.

On June 25, 1993, and again on August 16, 1993, the Service received petitions to remove the Mexican spotted owl from the List of Endangered and Threatened Wildlife (delist). In subsequent petition findings published in the Federal Register (58 FR 49467, 59 FR 15361) the Service addressed the issues raised in the petitions and determined that the petitioners did not present substantial information indicating that delisting the Mexican spotted owl was warranted. The petitioners have legally challanged this decision in Federal District Court in New Mexico in Coalition of Arizona/New Mexico Counties for Stable Economic Growth v. United States Fish and Wildlife Service, et al., CIV 94-1058-MV.

Habitat Characteristics

The physical and biological habitat features essential to the conservation of the Mexican spotted owl, referred to as the primary constituent elements, include those that support nesting, roosting, foraging, and dispersal. These elements were determined from studies of Mexican spotted owl habitat, including habitat structure, habitat use, and prey preferences, throughout the range of the owl.

The vegetative communities and structural attributes used by the Mexican spotted owl vary across its range. The vegetative communities consist primarily of warm-temperate and cold-temperate forests, and, to a lesser extent, woodlands and riparian deciduous forests. The mixed-conifer community appears to be most frequently used in portions of its range (Skaggs and Raitt 1988; Ganey and Balda 1989).

Mixed-conifer forests contain several species of overstory trees. The most common are white fir (Abies concolor), Douglas fir (Pseudotsuga menziesii), and ponderosa pine (Pinus ponderosa). Less common species are southwestern white pine (P. strobiformis), limber pine (P. flexilis), aspen (Populus tremuloides), and corkbark fir (Abies lasiocarpa var. arizonica).

The understory within mixed-conifer communities provides important roosting sites for Mexican spotted owls. The understory usually contains the same conifer species found in the overstory, with Gambel oak (Quercus gambelii), maples (Acer grandidentatum and A. glabrum), and New Mexico locust (Robinia neomexicana) also present. Montane

riparian canyon bottoms used by owls in the mixed-conifer zone may contain box elder (Acer negundo), narrowleaf cottonwood (Populus angustifolia), maples (Acer spp.), and alders (Alnus spp.).

In southeastern Arizona, owl habitat types include mixed-conifer and Madrean Evergreen Forest and Woodland (Ganey and Balda 1989; Duncan and Taiz 1992). Below the mixed-conifer vegetative zone are found two series of Madrean Evergreen Woodland: the upper oak-pine occurs at 1,675 to 2,200 meters (5,500 to 7,200 feet), and the lower evergreen oak (encinal) occurs at 1,525 to 1,980 meters (5,000 to 6,500 feet). Within these vegetative zones, and particularly at lower elevations, Mexican spotted owls are usually found in steep, forested canyons with rocky cliffs.

At the northern edge of their range in northeastern Arizona, southwestern Colorado, and southern Utah, Mexican spotted owls occur during the breeding season between 1,340 and 2,160 meters (4,400 to 7,100 feet) in canyon habitats within pinyon-juniper woodland (Pinus edulis and Juniperus osteosperma) or mixed-conifer forests. Canyon habitat is characterized by the cool, humid conditions found in the deep, steep-walled, fractured structures of sandstone slickrock. Canyons frequently contain riparian and conifer pockets, and adjacent slopes and mesa tops are vegetated by a variety of plant associations. Although no studies have been completed, preliminary studies show most Mexican spotted owl activity during the breeding season occuring within and adjacent to canyons. Owls roost in the riparian and coniferous pockets of canyon bottoms, on ledges, or in cavities in the slickrock canyon walls (Gutierrez and Rinkevich 1991; van Riper and Willey 1992).

Characteristics associated with forested Mexican spotted owl habitat usually develop with increasing forest age, but their occurrence may vary by location, past forest management practices, forest type, and productivity. Although Mexican spotted owl habitat is variable over its range, some general attributes are common to the subspecies' life-history requirements throughout its range. The attributes of nesting and roosting habitat typically include a moderate to high canopy closure (60 to 80 percent); a multi-layered canopy with large overstory trees of various species; a high incidence of large trees with various deformities (e.g., large cavities, broken tops, mistletoe infections, and other evidence of decadence); large snags; accumulations of fallen trees and other woody debris on the ground; and sufficient open space below the canopy for owls to fly.

Forest habitat characteristics are best expressed in older mixed-conifer forests. These characteristics may also develop in younger stands, especially when the stands contain remnant large trees or patches of large trees from earlier stands. Certain forest management practices may also enhance tree growth and mature stand characteristics where the older, larger trees are allowed to persist. Ganey and Balda

(1988) found an average of 402 ha (995 acres) of old-growth forest within the 847 ha (2,092 acre) average home range for 3 pairs of radio-monitored owls in northern Arizona. Fletcher (1990) reported an average of 62 ha (154 acres) of old-growth forest and an average of 465 ha (1,149 acres) of suitable habitat within the management territories established by the U.S. Forest Service (USFS) for 359 Mexican spotted owl sites in Arizona and New Mexico. Mexican spotted owl use of old growth may vary greatly among regional habitat types, forest types, and elevational ranges.

Forest habitat required for Mexican spotted owl nesting and roosting appears to be more restricted than that required for foraging. Ganey and Balda (1994) found significant owl selectivity in habitat use in a comparison of the habitat characteristics of roosting, foraging, and randomly available sites. Roosting sites had larger logs, greater canopy cover, and higher densities and basal areas of both trees and snags than foraging sites and random sites.

Spotted owls apparently use a wider array of habitat types for foraging than for nesting and roosting, including fairly open and non-contiguous forest, small openings, pure ponderosa pine forests, woodlands, and rocky slopes. Use of these components may be determined by their availability and by their proximity to the more characteristic habitat attributes previously described. However, Ganey and Balda (1994) found a greater selectivity in habitat used for foraging than for random sample sites. As did roosting sites, foraging areas had larger logs, greater canopy cover, and higher densities and basal areas of both trees and snags than random sites. Owls also consistently avoided foraging in forests in which the overstory had been partially harvested.

Little is known about the habitat requirements for dispersal. Habitat that meets the species' needs for nesting and roosting may also provide for foraging and dispersal. However, habitat that supports foraging or dispersal does not always provide constituent elements required for nesting and roosting. The definition of the term ``dispersal'' is frequently limited to post-fledging movements of juveniles. For the purposes of this rule, the Service considers the term to include all movement, including winter shifts in territory and dispersal from natal areas, and to encompass the important biological concepts of connectivity within and between clusters of Mexican spotted owl territories. Although habitat that allows for dispersal may be marginal or unsuitable for nesting or roosting, it provides connectivity between blocks of nesting habitat both locally and over the Mexican spotted owl's range that is essential to demographic interaction and genetic flow. Thus, dispersal habitat includes unoccupied habitat of varying quality that may support intermittent use as a ``stepping stone'' between occupied areas.

Mexican spotted owls occur in relatively isolated mountain ranges, often separated by wide expanses of Sonoran, Chihuahuan, and Great Basin desert and other nonforested lands. Preliminary studies of juvenile owl dispersal in southern Utah (Willey 1993) and New Mexico (Peter Stacey, University of Nevada, Reno, in litt., 1993) have shown movements across a wide variety of habitat types, including both riparian areas and vegetation types considered too open for consistent use by Mexican spotted owls. In Southern Arizona, spotted owls occur in isolated clusters separated by desert habitat. It is probable that these small clusters are not self-sustaining, but depend on immigration from other areas to maintain demographic and genetic viability.

The results of a 3-year telemetry study of owls and habitat in southern Utah indicate seasonal shifts in habitat use (van Riper and Willey 1992, Willey 1993). During the breeding season, about 25 percent of adult owl locations occurred outside of steep canyon terrain. During the fall and winter seasons, about half of the locations occurred on mesa-tops, benches, and warm slopes above the canyons. Movement out of the relatively cool canyons used in summer months to warmer areas used in winter may be related to the thermoregulatory requirements of the species. Movements out of the summer home ranges during the winter season were highly variable. A few owls moved completely out of their summer ranges, several shifted into adjacent areas with some overlap of seasonal ranges, and others remained within the same area year round.

Current Situation

Federal, State, tribal, and private lands contain habitat for the owl. Federal agencies involved include the Forest Service, Bureau of Indian Affairs (BIA), National Park Service (NPS), Bureau of Land Management (BLM), and Department of Defense. Tribes include the Navajo, San Carlos Apache, White Mountain Apache, Southern Ute, Jicarilla Apache, Hualapai, and the Mescalero Apache. Efforts to estimate habitat acreage and survey effort for owls have varied among agencies and tribes, with the most intensive work being done by the Forest Service.

Currently, land-managing agencies characterize Mexican spotted owl habitat under the term ``suitable.'' Suitable habitat is often identified only as habitat able to sustain the combined nesting, roosting, and foraging needs of the Mexican spotted owl. The definition often excludes additional habitat used only for foraging and may underestimate the total habitat available within an owl territory and across the species' range.

Forest Service land in Arizona and New Mexico contains 1,267,000 ha (3,130,000 acres) of suitable habitat, with an additional 421,000 ha (1,040,000 acres) described as being capable of returning to suitable condition (L. Henson, Southwest Regional Forester, in litt., 1993).

Forest Service land in Colorado is estimated to have about 356,000 ha (880,000 acres) of forested suitable habitat. Recent estimates of suitable canyon habitat in Utah national forests is about 58,000 ha (143,000 acres) (Kate Grandison, Dixie National Forest, in litt., 1994). No capable acreage figure is available for Utah and Colorado. Combining all Forest Service suitable habitat with the capable habitat in the Southwest Region (Arizona and New Mexico) yields a total of habitat acreage of 2,102,000 ha (5,193,000 acres) on Forest Service lands in the four-State area.

The Forest Service began Mexican spotted owl inventories in New Mexico and Arizona in 1988. Inventories began in Colorado in 1989, and in Utah in 1990. About 1,012,000 ha (2,500,000 acres) had been inventoried in the Forest Service Southwest Region as of the end of the 1993 survey season (USFS 1993). Utah and Colorado national forests have inventoried 354,000 ha (875,000 acres) and about 202,000 ha (500,000 acres), respectively (K. Grandison, in litt., 1994).

The Southwestern Region of the Forest Service establishes areas around known owl locations, called management territories (MTs). Each MT represents the occurrence of either a single owl or pair of owls, and is based on either confirmed nest or roost locations, or nighttime calling responses. Forest Service inventories through 1993 resulted in the establishment of 740 MTs in Arizona and New Mexico (Heather Hollis, Forest Service Southwest Regional Office, pers. comm., 1994). Four MTs have been established from the six sites with owl detection records in Utah (K. Grandison, pers. comm., 1994). No MTs have been established for the six owl sites in Colorado (John Verner, Pike/San Isabel National Forests, pers. comm., 1994).

There is potentially up to 435,000 ha (1,075,000 acres) of Mexican spotted owl habitat on Indian reservations. The actual amount of habitat may be lower because estimates supplied by the BIA Forestry Division were developed from timber-type maps containing little information about understory conditions or slope. The estimates may also omit minimally forested or nonforested canyon habitat acreage. Information available to the Service on owl survey efforts on Indian lands is as follows:

<bullet> The White Mountain Apache Tribe's Mexican spotted owl conservation plan states that approximately 54 owl sites have been located on the Fort Apache Indian Reservation;

<bullet> Owl surveys on the Navajo Reservation have resulted in the confirmation of owls at 26 sites (13 pairs and 13 singles) (John Nysted, Navajo Fish and Wildlife Department, pers. comm., 1994);

<bullet> The Jicarilla and the Hualapai wildlife departments conducted owl surveys in 1993; however, no owls were detected; and

<bullet> Current owl records exist for the San Carlos and

Mescalero Apache Reservations, but only limited information is available on population estimates.

A total of 297,000 ha (734,000 acres) of potential owl habitat occurs on BLM lands in Colorado, Utah, Arizona, and New Mexico (BLM, Colorado State Office, in litt. 1990; BLM, Utah State Office, in litt. 1990; BLM, New Mexico State Office, in litt. 1990; Ted Cordery, Arizona BLM, pers. comm., 1992). In 1993, a total of 25 owl records were known from BLM lands. There were 15 locations in Utah, 7 locations in Colorado, and 1 location in New Mexico. There are several historical records and two current records for sites on BLM lands in Arizona.

Most Mexican spotted owl habitat in national parks and monuments consists of minimally forested, steep, shaded canyons in the northern part of the owl's range. It is difficult to estimate acreage for this type of habitat. The NPS estimated that 23 parks and monuments in the Southwest contained between 96,000 and 177,000 ha (238,000 to 438,000 acres) of Mexican spotted owl habitat (NPS, Southwest Region, in litt. 1990; NPS, Rocky Mountain Region, in litt. 1990; J. Ray, NPS, Grand Canyon National Park, pers. comm., 1990). As of 1993, the NPS had records of a total of 32 sites in Utah and 2 sites in Colorado.

Between 72,000 and 82,000 ha (177,000 to 202,000 acres) of New Mexico and Arizona State lands contain forests and canyons that could be suitable Mexican spotted owl habitat. Several historical and recent records exist for New Mexico State lands. In Arizona, surveys conducted by the Arizona State Land Department and the Coconino National Forest resulted in the establishment of three MTs on Forest Service land. No information was available on suitable Mexican spotted owl habitat on State lands in Utah and Colorado. However, a single owl was recorded on Utah State lands in 1992.

Private lands in Arizona and New Mexico are currently estimated to contain up to 53,000 ha (130,000 acres) of owl habitat (U.S. Fish and Wildlife Service 1994). No estimates exist for owl habitat acreage on private lands in Colorado and Utah. This is partly due to the difficulty in assessing the extent of existing canyon habitat in the Colorado Plateau physiographic province, and partly a result of the insufficient amount of owl surveys accomplished to accurately determine the limit of the species' range.

The land-managing agencies and tribes estimate a total of 3,100,000 ha (7,666,000 acres) of suitable Mexican spotted owl habitat within the United States. These estimates of habitat availability for nesting and roosting activity are derived from median figures where estimates were given as an acreage range and include capable habitat estimates where available. The approximate proportion of Mexican spotted owl habitat in the Southwest is: Forest Service, 68 percent; Tribal, 14 percent; BLM, 10 percent; NPS, 4 percent; the States of Arizona and New Mexico, 2

percent; and private lands, 2 percent.

The percentage of habitat for each category of ownership is considered fairly accurate. However, the total acreage of owl habitat is likely overestimated. The error is a consequence of inadequate information on land status and questions about the types of vegetative communities that provide owl habitat. Several agencies expressed uncertainty about the accuracy of their habitat estimates.

The Service estimates that there is approximately 2,425,000 ha (5,988,000 acres) of owl habitat suitable for nesting and roosting. This estimate excludes most of the ponderosa pine community type because this vegetation type is not significantly used by nesting and roosting Mexican spotted owls. However, the Forest Service does consider ponderosa pine forest to be suitable habitat when it has the correct structural attributes (K.W. Fletcher, Forest Service Southwest Region, pers. comm., 1992), but the forest stand maps and inventory databases do not separate suitable from unsuitable stands in ponderosa pine. Forest Service Mexican spotted owl inventory data place approximately 50 MTs in ponderosa pine habitat, which would add about 40,000 ha (100,000 acres) to the suitable habitat base in Arizona and New Mexico (Forest Service, in litt. 1992).

Definition of Critical Habitat

The Service is required to base critical habitat proposals upon the best scientific and commercial data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat. The Service may exclude areas from critical habitat designation when the benefits of exclusion outweigh the benefits of including the areas within critical habitat, provided the exclusion will not result in the extinction of the species (Section 4(b)(2) of the Act).

Critical habitat is defined in Section 3(5)(A) of the Act as: ``(i) the specific areas within the geographic area occupied by a species . . . on which are found those physical or biological features (I) essential to the conservation of the species, and (II) that may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species." The term ``conservation," as defined in Section 3(3) of the Act, means ``. . . to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary," i.e., the species is recovered and can be removed from the list of endangered and threatened species.

Role in Species Conservation

Proposed designation of critical habitat includes areas subject to commercial timber harvest, the primary threat to the species. The Service considers the protections that result from the listing of the species as threatened, such as the jeopardy prohibition under section 7 and the prohibition of take under section 9 of the Act, to be adequate protection in areas where other, localized threats may be present.

The use of the term ``conservation'' in the definition of critical habitat indicates that its designation should identify lands that may be needed for a species' eventual recovery and delisting. However, when critical habitat is proposed or designated at the time a species is listed, the Service frequently does not know precisely what may be needed for recovery. In this regard, critical habitat serves to preserve options for a species' eventual recovery. The Service is continuing to work with the Recovery Team to determine those areas and management approaches considered necessary for the recovery and conservation of the species.

The designation of critical habitat will not, in itself, lead to recovery, but, through regulations under section 7 of the Act, may assist the Service and all Federal agencies in contributing toward the species' conservation. Critical habitat helps focus conservation activities by identifying areas that contain essential habitat features (primary constituent elements), regardless of whether they are currently occupied by the listed species, thus alerting the public and land-managing agencies to the importance of an area in the conservation of a listed species. Critical habitat also identifies areas that may require special management considerations or protection, and provides additional protection to areas where significant threats to the species have been identified. Critical habitat receives protection from destruction or adverse modification through required consultation under section 7 of the Act with regard to actions carried out, funded, or authorized by a Federal agency. Section 7 also requires conferences on Federal actions that are likely to result in the adverse modification or destruction of proposed critical habitat. Aside from the added protection provided under section 7, the Act does not provide other forms of protection to lands designated as critical habitat.

Designating critical habitat does not create a management plan for a listed species. Designation does not establish numerical population goals, prescribe specific management actions (inside or outside of critical habitat), nor does it have a direct effect on areas not designated as critical habitat. Specific management recommendations for critical habitat are most appropriately addressed in recovery plans, management plans, and through section 7 consultation.

Critical habitat identifies specific areas essential to the

conservation of a species. Areas not currently containing all of the essential features, but with the capability to do so in the future, may also be essential for the long-term recovery of the species, particularly in certain portions of its range, and may be designated as critical habitat. However, not all areas containing the features of a listed species' habitat are necessarily essential to a species' survival. Areas not included within critical habitat boundaries that contain one or more of the primary constituent elements are still important to a species' conservation and may be addressed under other facets of the Act, and other conservation laws and regulations.

The steps used to determine proposed critical habitat are summarized in the following sections on Primary Constituent Elements, and Criteria for Identifying Candidate Critical Habitat Units.

Primary Constituent Elements

In determining which areas to propose as critical habitat, the Service considers those physical and biological attributes that are essential to a species' conservation and which may require special management considerations or protection (section 3(5)(A)(i), of the Act). Such physical and biological attributes are described in 50 CFR 424.12. They include, but are not limited to, the following:

<bullet> Space for individual and population growth, and for normal behavior;
<bullet> Food, water, or other nutritional or physiological requirements;
<bullet> Cover or shelter;
<bullet> Sites for breeding, reproduction, or rearing of offspring; and
<bullet> Habitats that are protected from disturbance or are representative of the historic geographical and ecological distributions of a species.

The primary constituent elements of critical habitat for the Mexican spotted owl are those areas that include, but are not limited to, the habitat components which provide or which have the potential to provide for nesting, roosting, foraging, or dispersal. Forested habitats used for nesting and roosting are typically characterized as supporting mature stand attributes including high canopy closure, multi-canopied structure, coniferous vegetation (sometimes including a hardwood understory), large diameter trees, high densities of live trees, snags and large logs. Canyon habitats for nesting and roosting are generally sparsely vegetated, steep-walled areas, often containing rock outcrops and crevices. Nesting and roosting habitat also supports owl foraging activity; however, a wider array of habitat attributes may

be found in areas used solely for foraging and/or dispersal, including fairly open and non-contiguous forest, small openings, woodlands, and rocky slopes.

Areas of proposed critical habitat include both ``suitable'' and ``unsuitable'' forest habitat. Several definitions of ``suitable'' are currently used by different land-managing agencies; however, the term ``suitable'' generally refers to habitat that supports the combined activities of nesting, roosting, and foraging. In the Southwest, ``suitable'' habitat is often interpersed with ``unsuitable'' habitat that may be important for foraging. This critical habitat proposal is not limited to habitat that meets ``suitable'' definitions, but includes habitat with any of the primary constituent elements described above.

Criteria for Identifying Candidate Critical Habitat Units

The primary objective in proposing critical habitat is to identify existing and potential Mexican spotted owl habitat considered essential for the conservation of the species, and in need of special management considerations or protection. The Service has focused on available nesting and roosting habitat to identify locales that provide a nucleus for delineation of critical habitat units. Additional habitat was added as needed to develop units based on the criteria described below. In its proposal of critical habitat, the Service has considered all habitat types needed by the species through its definition of the primary constituent elements.

Using aerial photography, Mexican spotted owl habitat and forest type maps, and field verification, the Service identified areas to be considered for designation as critical habitat. Because habitat maps available to the Service were generally based on the varying definitions of ``suitable habitat'' used by the agencies, the major focus was on habitat that provides nesting, roosting, and some foraging attributes. To assist in these determinations, the Service relied upon the following principles developed by the Interagency Scientific Committee (Thomas et al. 1990) for the northern spotted owl, and by others working in the field of conservation biology:

--Develop and maintain large contiguous blocks of habitat to support multiple reproducing pairs of owls;
--Minimize fragmentation and edge effect to improve habitat quality;
--Minimize distance to facilitate dispersal among blocks of breeding habitat; and
--Maintain range-wide distribution of habitat to facilitate recovery.

Several qualitative criteria were considered when determining whether to select specific areas as potential critical habitat. The following discussion describes the criteria and provides an explanation of their use in selecting specific areas.

(1) Currently Suitable Habitat: The Service concentrated on the existence of currently suitable Mexican spotted owl forested habitat (primarily nesting and roosting, but also foraging) that contains one or more of the primary constituent elements. The Service evaluated the quality of existing habitat based on available habitat maps and delineated the best available habitat (i.e., the least fragmented, most contiguous forest habitat) in the critical habitat units.

(2) Large Contiguous Blocks of Habitat: The Service identified, where available, large, contiguous blocks of habitat or areas that mostly consist of Mexican spotted owl habitat. Areas were selected so that critical habitat units would include as little low-quality habitat as possible.

(3) Dispersal Distances: The widely-spaced nature of most Mexican spotted owl territory clusters generally determined the distances between proposed critical habitat units. However, where a unit was developed to provide additional unoccupied habitat to enhance the probability of cluster persistence, units were oriented to minimize inter-unit distances and facilitate potential dispersal.

(4) Occupied Habitat: In evaluating potential critical habitat units, the Service gave primary consideration to habitat currently occupied by pairs or resident singles; however, some unoccupied areas were selected if they were important for other reasons (e.g., territory cluster contiguity and linkage). The Service may designate unoccupied areas when such areas are essential for the conservation of the species (section 3(5)(A)(ii) of the Act). Some units were selected based on habitat suitability although no surveys had yet been conducted. All areas selected, however, have potential for supporting Mexican spotted owls.

(5) Rangewide Distribution: The Service is proposing critical habitat units throughout the existing United States range of the Mexican spotted owl to maintain genetic variation and cluster linkage.

(6) Special Management or Protection: Section 3(5)(A)(i)(II) of the Act defines critical habitat as areas ``which may require special management considerations or protection.'' The Service evaluated the need for special management in terms of the existing situation (e.g., current quality of existing habitat), the relative importance of territory clusters, or current management activities, and threats. For example, the Fort Apache Indian Reservation is managed under an uneven-age timber harvest prescription, unlike the even-age management cited as a threat to the Mexican spotted owl. The White Mountain Apache Tribe has developed a conservation strategy that the Service believes will

adequately protect the Mexican spotted owl on the Fort Apache Indian Reservation. Thus, the Service has determined that additional special management consideration or protection is not needed, and the area is not proposed as critical habitat. All other areas selected are included in this proposal because of their need for special management or protection. However, the Forest Service and other Indian tribes have begun work with the Service to develop and implement conservation agreements or management plans to conduct timber harvests while providing adequate protection to the owl and its habitat.

In addition, the Service evaluated the adequacy of existing protection under the Act to determine whether critical habitat would provide a necessary incremental benefit to the species. For example, significant protection already exists under section 7 of the Act, such as the prohibition of jeopardy to the species, the minimization of project impacts through mandatory reasonable and prudent measures to minimize incidental take, etc. The Service considers commercial timber harvest to be the primary threat to the Mexican spotted owl, and thus identified areas (proposed critical habitat units) where commercial timber harvest is planned or authorized. In those areas, the designation of critical habitat can provide protection above the current protection under the Act by protecting unoccupied habitat. It is important to note, however, that other areas are essential to the species' recovery, and their exclusion from proposed critical habitat designation does not imply otherwise. Although other threats to Mexican spotted owls have been mentioned, such as oil and gas leasing, grazing, recreation, etc., the Service has been unable to find evidence that these threats are significant to the Mexican spotted owl population as a whole. Rather, these activities are best dealt with through section 7 consultation on the species.

(7) Adequacy of Existing Regulatory Mechanisms: The Service considered the existing legal status of areas (i.e., reserved areas such as wilderness or parks) and has not proposed reserved areas as critical habitat. In general, the current classification of wilderness areas and parks provides adequate protection against potential habitat-altering activities because they are primarily managed as natural ecosystems. These lands are often essential to the conservation of the species, as they provide important links and contain large areas of habitat in relatively pristine condition. However, these lands by themselves do not provide adequate habitat to support a viable range-wide Mexican spotted owl population. The Service considered their relative contribution to the Mexican spotted owl's conservation but generally did not include them in critical habitat because of their current classification unless they were inclusions within larger surrounding critical habitat units.

Proposed Critical Habitat Designation

The Service has identified 112 proposed critical habitat units totaling 1,931,264 ha (4,770,223 acres) in Arizona, New Mexico, Utah, and Colorado. The approximate acreage of proposed critical habitat by land ownership is shown in Table 1.

Management Considerations

Forest Practices

Management direction for lands with Mexican spotted owl habitat varies within and between Tribal governments and Federal and State agencies. A management emphasis for timber production is in effect on much of Forest Service and tribally managed land. Some BLM Mexican spotted owl habitat is managed primarily for natural resources extraction, including timber, but is still available for wildlife and recreation. National Park Service lands are managed for recreation and preservation of natural values. State lands within owl habitat are typically checkerboarded with Federal lands and are usually not large enough to support owl territories of their own. State lands are managed with similar resource management emphases as BLM land. Management emphasis on private lands providing Mexican spotted owl habitat is unknown.

Table 1.--Critical Habitat Acreage by Land Ownership and State

	Arizona	New Mexico	Colorado	Utah	Total
Forest Service	1,510,148	1,883,332	34,500	188,386	3,616,366
Bureau of Land Management	0	10,790	562	72	11,424
National Park Service	45,892	0	0	0	45,892
Department of Defense	2,013	0	0	0	2,013
State	3,333	5,847	620	20	9,820
Tribal	401,829	499,334	61,531	0	962,694
Private	28,396	86,185	6,890	543	122,014
Total	1,991,611	2,485,488	104,103	189,021	4,770,223
Critical habitat units	38	67	7	1	*112

*One critical habitat unit overlaps two States.

Although the Forest Service is undergoing a process to change its dominant silvicultural practices to uneven age systems, its current management plans call for harvestable timberland in Arizona and New

Mexico to be primarily managed under an even-aged system using shelterwood management. Commercial forests on the Navajo Indian Reservation have also been managed under shelterwood prescriptions (James Carter, BIA, pers. comm., 1990). Other commercial forests on Indian lands in the Southwest are managed primarily as uneven-aged stands by use of selective logging. Under the shelterwood system, a stand is scheduled for a series of harvests culminating in a full rotation cycle in 120 years or less. This cycle length maximizes timber production, but does not provide enough time for stands to reach the mature to old-growth conditions characteristic of forested Mexican spotted owl habitat, and results in forest age distributions unnaturally skewed toward younger stands. The conversion of complexly structured forest stands to evenaged stands was identified by the Service (USFWS 1991, USFWS 1993) as the greatest threat facing the Mexican spotted owl.

The Service has determined habitat loss trends from current National Forest plans, which provide the only available projections on timber harvest trends into the future. Half of all shelterwood management on National Forests is occurring in forests not suitable for breeding (primarily pure ponderosa pine), and the other half in suitable forest habitat. The Forest Plans project that an estimated 0.4 percent of Mexican spotted owl habitat will be made unsuitable for breeding each year in the future if timber extraction continues as outlined under current forest plans.

Uneven-aged management like that employed by the White Mountain Apache Tribe maintains and promotes development of complex forest structures. Methods include individual tree selection and group selection. Individual tree selection entails the harvest of trees selected from a size-distribution curve appropriate for forest type, site conditions, and desired regeneration levels. Trees of various size and age classes are retained, and multi-storied attributes and vertical diversity are maintained. Group selection creates openings in the forest stand up to a hectare (1 to 2 acres) in size, developing small even-aged clumps of trees and within-stand horizontal diversity. The Service considers the use of uneven-age management the silvicultural method most compatible with maintenance of Mexican spotted owl habitat.

Current Management

The States of Arizona, Utah, and Colorado list the Mexican spotted owl as a threatened species. Capture, handling, transportation, and take of Mexican spotted owls are regulated by game laws and special licenses for live wildlife. These State laws and licensing requirements regulate hunting, recreation, and scientific investigation. Habitat protection is not provided through State laws and regulations.

The Service is aware of Mexican spotted owl protection guidelines that have been developed by two Indian nations. The guidelines for the

Mescalero Apache Reservation establish a 29 ha (72 acre) buffer zone around active Mexican spotted owl roost or nest sites. No management activities may occur within the buffer zone during the reproductive season. After the reproductive season, the buffer is reduced to a 46-meter (150-foot) radius encompassing 0.66 ha (1.6 acres) around significant roost areas and a 61-meter (200-foot) radius encompassing 1.17 ha (2.9 acres) around nests.

The Fort Apache Indian Reservation is managed under a conservation plan approved by the Tribal Council. This plan designates two levels of owl protection. The first level protects clusters of owls and their intervening habitat, and the second level focuses on individual owl sites. This management strategy is largely based on a landscape rather than site-by-site approach.

Most Federal agencies have policies to protect State-listed threatened or endangered species, and some agencies also protect species that are candidates for Federal listing. For instance, the NPS Organic Act protects all wildlife on national parks and monuments. However, general policies often do not include standards and guidelines to measure policy success.

Prior to listing, the Migratory Bird Treaty Act (MBTA) provided the only Federal protection for the Mexican spotted owl. Under the provisions of the MBTA, it is unlawful to pursue, hunt, take, capture, or kill in any manner any migratory bird unless permitted by regulations. Although the Mexican spotted owl typically remains in its summer range throughout the year, it is included on the list of birds protected under the MBTA.

An interagency agreement for purpose of ensuring population viability of the spotted owl (Strix occidentalis), including the Mexican spotted owl, was signed by the Service, BLM, NPS, and Forest Service on August 12, 1988 (U.S. Department of Interior 1988). Under this agreement, each agency agreed to manage its lands to provide owl habitat, to carry out habitat and population inventories sufficient to assess long-term trends, and to carry out research activities sufficient to provide empirical information on the validity of planning assumptions. The degree to which this agreement has been implemented has varied within and among agencies.

Specific management policies for the Mexican spotted owl have been developed by the BLM in Colorado and New Mexico. The policy in Colorado states, ``In areas with a confirmed nest or roost site, surface management activities will be limited and will be determined on a case by case basis to allow as much flexibility as possible outside of the core area.'' Management policy in New Mexico states that habitat core areas and territories of appropriate size will be established and preserved wherever Mexican spotted owls are found.

Detailed guidelines for Mexican spotted owl management have been

developed by the Forest Service Southwest Region. The guidelines were first issued as Mexican spotted owl Interim Directive (ID) No. 1 in June 1989, and reissued as Mexican spotted owl ID No. 2 in June 1990. Utah and Colorado national forests adopted ID No. 2 in 1991. The guidelines expired December 26, 1991, but the Forest Service is continuing to manage under ID No. 2. The IDs require establishment of a Mexican spotted owl MT around each nest or roost site. Each MT (except those on the Gila and Lincoln National Forests) has a core area of 182 ha (450 acres) and an overall size of 810 ha (2,000 acres). Activities within the core area are limited to road construction. Within the MT, activities, including timber harvest, are limited to a maximum of 314 ha (775 acres). The intent of the guidelines is to retain at least 405 ha (1,000 acres) of suitable habitat within the MT after proposed management activities are identified and located. Forest Service estimates indicate that suitable habitat within MTs currently averages 466 ha (1,150 acres) for territories in New Mexico and Arizona. In Utah, MTs encompass 1,340 ha (3,350 acres) with a core of 350 ha (875 acres) (K. Grandison, pers. comm., 1994).

Application of the IDs has not been uniform on all forests. Guidelines on two forests were modified. The core area was reduced in size to 121 ha (300 acres) for the Lincoln National Forest under ID No. 1. Under ID No. 2, a core area of 182 ha (450 acres) was established for all forests but the overall territory size was reduced to 607 ha (1,500 acres) for the Lincoln and Gila National Forests. Both forests have significant Mexican spotted owl populations, which has resulted in conflicts with timber harvest plans. The ID provides no protection for unoccupied suitable Mexican spotted owl habitat, nor does it address forest activities not related to timber harvest.

The Service has examined spotted owl protective measures throughout the species' range. The management strategies employed by various agencies and tribes have been developed independently without a common overall approach. These strategies provide varying levels of protection to existing owl sites, but most do not conform to an overall, landscape recovery strategy. In addition, there has been no assessment of the adequacy of these varied approaches in promoting range-wide conservation of the Mexican spotted owl. Thus the Service has determined that the designation of critical habitat in areas subject to timber harvest will help to preserve options until a long-term, range-wide management strategy is developed and its implementation ensured.

Available Conservation Measures

Recovery Planning

The Service appointed the Team in March 1993. Since that time the

Team has assembled all available data on Mexican spotted owl biology, the threats faced across the species' range, current protection afforded the species, etc. Using that information, the Team developed the Draft Mexican Spotted Owl Recovery Plan. Availability of that document will be announced in the Federal Register.

The Draft Mexican Spotted Owl Recovery Plan recommends a landscape management strategy that will conserve the species as population and habitat trends are assessed. If made final, the recovery plan will guide management of this species over the next 10-15 years. The Service will assess the value of critical habitat in implementing the recovery plan, and that assessment may influence the final critical habitat rulemaking.

Section 7 Consultation

Section 4(b)(8) of the Act requires, for any proposed or final regulation to designate critical habitat, a brief description and evaluation of those activities (public or private) that may adversely modify such habitat or may be affected by such designation. Regulations found at 50 CFR 402.02 define destruction or adverse modification of critical habitat as a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

Section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to destroy or adversely modify critical habitat. This Federal responsibility accompanies, and is in addition to, the requirement in section 7(a)(2) of the Act that Federal agencies ensure their actions do not jeopardize the continued existence of any listed species. As required by 50 CFR 402.14, a Federal agency must consult with the Service if it determines an action may affect a listed species or critical habitat. Thus, the requirement to consider adverse modification of critical habitat is an incremental section 7 consideration above and beyond section 7 review to evaluate jeopardy and incidental take of the species. Regulations implementing this interagency cooperation provision of the Act are found at 50 CFR 402.

Conference on Current Activities

Section 7(a)(4) of the Act and 50 CFR 402.10 of the regulations require Federal agencies to confer with the Service on any action that is likely to result in destruction or adverse modification of proposed

critical habitat. The Act requires Federal agencies to reinitiate consultation on previously reviewed actions should conditions change (e.g., if the Service designates critical habitat); consequently, some Federal agencies may request conference with the Service on actions for which formal consultation has been completed. Conference reports provide conservation recommendations to assist the agency in eliminating conflicts that may be caused by the proposed action. The conservation recommendations in a conference report are advisory.

If an agency requests, and the Service concurs, the Service may issue a formal conference report. Formal conference reports on proposed critical habitat contain a biological opinion that is prepared according to 50 CFR 402.14, as if critical habitat were designated. The Service may adopt the formal conference report as the biological opinion when the critical habitat is designated, if no significant new information or changes in the action alter the content of the opinion (see 50 CFR 402.10(d)).

Examples of Proposed Actions

Areas which contain habitat used by the owl during its life cycle support a number of existing, proposed, and potential activities. Commercial activities that may affect Mexican spotted owl critical habitat include timber harvest, timber salvage harvest, other wood fiber utilization (e.g., paper, firewood), snag removal, construction of hydroelectric facilities, and construction of ski areas and resort facilities. Additional activities include ``personal use'' commodity production, such as fuelwood gathering and Christmas tree cutting. Activities associated with land management by involved agencies include campground and road construction, certain fire suppression activities such as fire break construction and use of chemical fire retardants; silvicultural activities such as forest pest management and stocking control; and military maneuvers. The Service recognizes that these activities may affect individual owls and portions of their habitat. However, the Service has identified the timber management program as the activity that constitutes the most significant threat to the survival of the species because of its scope across the landscape, and because it is the predominant threat to habitat in the areas with the largest owl populations. The Service believes that where there are other activities section 7 consultations on effects of projects to the species and other regulatory mechanisms provide adequate protection.

In evaluating proposed activities within critical habitat through section 7 analyses, the Service uses project descriptions and biological assessments provided by the action agency, and focuses on the likely impacts of a project on the constituent elements of the site and surrounding areas. The Federal agencies requesting consultation can

assist the Service in its evaluation of proposed actions by providing detailed information on the habitat configuration of a project area, habitat conditions of surrounding areas, and information on known locations of Mexican spotted owls.

Proposed actions would be individually examined in terms of site-specific impacts to the primary constituent elements and the reasons for which the critical habitat unit was designated. Certain proposed actions, such as the selective harvest or commercial thinning of timber stands, may or may not destroy or adversely modify critical habitat, depending on the type and extent of harvest and the pre-project condition of the site in relation to Mexican spotted owl habitat needs. Activities that disturb, remove, or retard the development of the primary constituent elements within designated critical habitat units may adversely modify the Mexican spotted owl's critical habitat. These activities may include, but are not limited to, actions that would significantly reduce the canopy closure of a timber stand, modify multi-canopy stand structure, significantly reduce the stand's average tree diameter, significantly alter tree size and age class distribution and species composition, reduce the availability of nesting structures and sites, reduce the suitability of the landscape to provide for safe movement, or reduce the abundance or availability of prey species.

In addition to site-specific analysis, Service evaluation of proposed Federal actions would also consider the additive effects of past, on-going, and proposed actions. Proposed projects within critical habitat would also be examined spatially to determine adverse modification of habitat across the surrounding landscape. The additive effects of actions in proximity to the proposed project may collectively result in the appreciable reduction of the value of a critical habitat unit. Conversely, an isolated proposed action within a spacious expanse of unmodified habitat may not adversely affect the function for which a critical habitat unit was designed.

An activity cannot cause adverse modification of critical habitat in an area that does not contain or have the potential to contain the physical and biological features comprising the primary constituent elements. Due to limitations in the fineness of the mapping effort, and the interspersed nature of suitable and unsuitable habitat types, some such areas have been incidentally included in the proposed designation as inclusions within surrounding Mexican spotted owl habitat. Furthermore, some activities may not be restricted due to critical habitat designation because there would be no effect on the primary constituent elements. However, Federal projects that do not adversely modify critical habitat may still affect Mexican spotted owls (e.g., through disturbance) and, therefore, may be subject to review under section 7 of the Act.

Some activities may be considered to be of benefit to Mexican

spotted owl habitat and, therefore, would not be expected to adversely modify critical habitat. Examples of activities that could benefit critical habitat may include some protective measures such as fire suppression, prescribed burning, brush control, snag creation, and certain silvicultural activities such as thinning.

Other Conservation Measures

Section 9 of the Act prohibits intentional and non-intentional ``take'' of listed species and applies to all landowners regardless of whether or not their lands are within critical habitat. The term ``take'', as defined by the Act, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. ``Incidental take'' is take that results from, but is not the purpose of, an otherwise lawful activity.

Section 7 and section 10(a)(1)(B) authorize the Service to allow the incidental taking of listed species through otherwise lawful activities such as timber harvesting. Biological opinions completed as part of formal section 7 consultation may authorize a set amount of incidental take associated with Federal activities. For non-Federal actions, Section 10 incidental take permit applications must be supported by a habitat conservation plan that identifies conservation measures that the permittee agrees to implement to conserve the species, usually on the permittee's lands. A key element of the Service's review of a conservation plan is a determination of the plan's effect upon the long-term conservation of the species. A conservation plan would be approved and a section 10(a) permit issued if it would minimize and mitigate the impacts of the taking and would not appreciably reduce the likelihood of the survival and recovery of that species in the wild.

The Service expects limited Federal involvement for projects on non-Federal lands and few formal section 7 consultations on non-Federal lands that are included in proposed critical habitat. For those areas of non-Federal land within proposed critical habitat, section 7 would apply only for actions that are funded, authorized, or carried out by a Federal agency. The States and private individuals are still subject to the ``take'' prohibitions under section 9 of the Act, however, and may enter into the section 10 conservation planning process where appropriate.

Economic Analysis

Section 4(b)(2) of the Act requires the Service to designate critical habitat on the basis of the best scientific and commercial information available and to consider the economic and other relevant

impacts of designating a particular area as critical habitat. The Secretary may exclude areas from critical habitat upon a determination that the benefits of such exclusions outweigh the benefits of specifying such areas as part of critical habitat. The exclusion of such areas from critical habitat may not occur when it is determined such exclusion may result in the extinction of the species concerned. An economic analysis is currently being prepared. The Service intends to make the economic analysis available for public review and comment, and notice of its availability will be published in the Federal Register and local newspapers.

Public Comments Solicited

The Service intends that any final rule resulting from this proposal will be as accurate and effective as possible. Therefore, comments or suggestions from the public, governmental agencies, Indian nations, the scientific community, industry, and any other interested parties concerning this proposed rule are hereby sought. Comments are particularly sought concerning:

(1) The reasons why any habitat should or should not be determined to be critical habitat as provided by section 4 of the Act;

(2) Specific information on the amount and distribution of Mexican spotted owl habitat, and the number of owls and distribution by landowner and land designation;

(3) Specific information on the ability or values of proposed areas to support other listed, proposed, or candidate species and the relation of this proposal to maintaining biodiversity and ecosystem integrity;

(4) Current or planned activities in the subject areas and their possible impacts on proposed critical habitat;

(5) Any foreseeable economic or other impacts resulting from the proposed designation of critical habitat;

(6) Economic values associated with benefits of designating critical habitat for the Mexican spotted owl. Such benefits include those derived from non-consumptive uses, e.g., hiking, camping, bird-watching; enhanced watershed protection; improved air quality; increased soil retention; ``existence values", and reductions in administrative costs; and

(7) The methodology the Service might use, under section 4(b)(2) of the Act, in determining if the benefits of excluding an area from critical habitat outweigh the benefits of specifying the area as critical habitat.

Comments received during the 60-day comment period on this proposed rule will be considered during preparation of a final rulemaking. The final decision on the designation of critical habitat will take into

consideration the comments and any additional information received by the Service.

Public Hearings

Section 4(b)(5)(E) of the Act provides for a public hearing on this proposal, if requested within 45 days of the date of publication of the proposal. As indicated under DATES, the Service will schedule public hearings on this proposal due to the anticipated number of requests for such hearings.

Parties wishing to make statements for the record should bring copies of their statements to the hearing. Oral statements may be limited in length, if necessary. There are no limits to the length of a written statement presented at the hearing or subsequently submitted for the record. Written comments will be accepted from any party until the close of the comment period (see DATES). Written submissions will be given the same weight and consideration as oral comments presented at any hearing.

National Environmental Policy Act

The Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to Section 4(a) of the Act. A notice outlining the Service's reasons for this determination was published in the Federal Register on October 25, 1983 (48 FR 49244).

Required Determinations

This document has been reviewed by the Office of Management and Budget under Executive Order 12866. Based on the information discussed in this rule concerning public projects and private activities within proposed critical habitat areas, it is not clear whether significant economic impacts will result from the critical habitat designation. There are a limited number of actions on private lands that have Federal involvement through funds or permits that may be affected by critical habitat designation. A final determination of the impacts of the proposal is not possible until the required economic analysis is completed. The final rule will contain determinations of the effects of the proposed actions in compliance with all relevant laws, regulations, and Executive Orders. Also, no direct costs, enforcement costs, information collection, or recordkeeping requirements are imposed on small entities by this proposed designation. Further, the rule contains no recordkeeping requirements as defined by the Paperwork Reduction Act

of 1980.

References Cited

A complete list of all references cited herein, as well as others, is available upon request from the New Mexico Ecological Services State Office (see ADDRESSES above).

Author(s)

The primary authors of this proposed rule are Marcos Gorresen and Sonja Jahrsdoerfer (see ADDRESSES.)

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, and Transportation.

Proposed Regulation Promulgation

Accordingly, it is hereby proposed to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17--[AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361-1407; 16 U.S.C. 1531-1544; 16 U.S.C. 4201-4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Section 17.11(h) is amended by revising the ``Critical Habitat'' entry for ``Owl, Mexican spotted,'' under Birds, to read ``Sec. 17.95(b)'' instead of ``NA''.

3. Section 17.95(b) is amended by adding critical habitat of the Mexican spotted owl (Strix occidentalis lucida), in alphabetical order (following the entry for EVERGLADE SNAIL KITE and preceding the entry for PALILA), reading as follows:

Sec. 17.95 Critical habitat--fish and wildlife.

* * * * *

(b) * * *

Mexican Spotted Owl (Strix occidentalis lucida)

BILLING CODE 4310-55-P

<GRAPHIC><TIFF>TP07DE94.000

<GRAPHIC><TIF1>TP07DE94.001

BILLING CODE 4310-55-C

AZ-ASNF-1. From Bureau of Land Management maps: Nutrioso 1981, Clifton 1986. The perimeter of critical habitat unit AZ-ASNF-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

681051 E 3731419 N

following Arizona/New Mexico state line southerly to

681495 E 3707131 N

continuing to

677783 E 3705800 N
671541 E 3710523 N
669198 E 3711150 N
669435 E 3713944 N
670199 E 3716135 N
675165 E 3718090 N
677641 E 3721888 N
677316 E 3724015 N
677631 E 3725816 N
680104 E 3730230 N

to closure at starting point

681051 E 3731419 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF2>TP07DE94.002

BILLING CODE 4310-55-C

AZ-ASNF-2. From Bureau of Land Management maps: Nutrioso 1981, Clifton 1986. The perimeter of critical habitat unit AZ-ASNF-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

639214 E 3749106 N
642179 E 3749878 N
645077 E 3747570 N
646687 E 3746842 N
648824 E 3748876 N
647673 E 3751291 N
649459 E 3752872 N
650824 E 3752867 N
651211 E 3751025 N
654982 E 3750550 N
656312 E 3747486 N
655236 E 3747262 N
652013 E 3747746 N
651420 E 3748351 N
651195 E 3746889 N
654376 E 3743391 N
657944 E 3743429 N
659991 E 3742676 N
661790 E 3742563 N
662869 E 3743970 N
665020 E 3745825 N
667435 E 3745415 N
669014 E 3744822 N
670283 E 3745982 N
670810 E 3745951 N
671244 E 3743995 N
674428 E 3742835 N
676432 E 3742513 N
675001 E 3741445 N
675743 E 3740486 N
676609 E 3740440 N
677731 E 3739776 N
678582 E 3738696 N
680944 E 3737931 N

following Arizona/New Mexico state line southerly to

681013 E 3733458 N

continuing to

679464 E 3734541 N
680305 E 3732752 N
678775 E 3730665 N
677546 E 3728106 N
674034 E 3727288 N
671656 E 3727420 N
668866 E 3727132 N
667962 E 3724783 N
666870 E 3723259 N
667393 E 3721292 N
667035 E 3719815 N
666153 E 3719402 N
663772 E 3719700 N
658281 E 3718204 N
658847 E 3717564 N
662849 E 3717143 N
664072 E 3715468 N
662059 E 3715429 N
659601 E 3714377 N
655718 E 3714964 N
655822 E 3712485 N
656976 E 3711057 N
656069 E 3709334 N
656343 E 3707794 N
658159 E 3706659 N
658013 E 3704701 N
659490 E 3703114 N
658179 E 3702109 N
655070 E 3701666 N
652153 E 3700510 N
651498 E 3701202 N
650278 E 3699517 N
649069 E 3698788 N
648455 E 3701359 N
646212 E 3702714 N
646353 E 3704471 N
647862 E 3705369 N
647748 E 3707584 N
649714 E 3707609 N
652851 E 3709839 N
652318 E 3711485 N
650282 E 3711668 N
648510 E 3714360 N

645267 E 3715035 N

following Bear Wallow Wilderness boundary Northerly and westerly to

639601 E 3722385 N

following San Carlos Indian Reservation/Fort Apache Indian Reservation and Apache-Sitgreaves National Forest boundary northerly to

639432 E 3734282 N

continuing to

641330 E 3732466 N
642070 E 3731309 N
642976 E 3731437 N
643724 E 3732036 N
643563 E 3735258 N
645229 E 3736810 N
646428 E 3734075 N
645026 E 3732104 N
650329 E 3732547 N
651277 E 3731815 N
656036 E 3731960 N
659171 E 3730782 N
662219 E 3728181 N
664658 E 3728125 N
666802 E 3730143 N
668342 E 3730795 N
669719 E 3730929 N
667147 E 3738221 N
666111 E 3740438 N
665857 E 3742187 N
663884 E 3741550 N
662970 E 3739537 N
662077 E 3739099 N
664115 E 3737321 N
663936 E 3736449 N
665674 E 3735320 N
666376 E 3732465 N
660952 E 3736942 N
658668 E 3740059 N
657053 E 3740614 N

655354 E 3740265 N
652697 E 3737861 N
652607 E 3740274 N
650700 E 3739798 N
649747 E 3738511 N
648720 E 3739843 N
646778 E 3739757 N
645317 E 3740388 N
644110 E 3742249 N
643992 E 3744258 N
641076 E 3745004 N
639222 E 3747917 N

to closure at starting point

639214 E 3749106 N

BILLING CODE 4310-55-NR

<GRAPHIC><TIF3>TP07DE94.003

BILLING CODE 4310-55-C

AZ-ASNF-3. From Bureau of Land Management map: Nutrioso 1981. The perimeter of critical habitat unit AZ-ASNF-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

680677 E 3751624 N

following Arizona/New Mexico state line southerly to

680860 E 3742985 N

continuing to

679015 E 3743738 N
680408 E 3744654 N
680105 E 3745776 N
676812 E 3747711 N
674522 E 3749363 N
673965 E 3751137 N
675971 E 3751301 N
677378 E 3749014 N

677415 E 3752229 N
675447 E 3754140 N
676520 E 3754494 N
678912 E 3753965 N
679527 E 3752800 N

to closure at starting point

680677 E 3751624 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF4>TP07DE94.004

BILLING CODE 4310-55-C

AZ-ASNF-4. From Bureau of Land Management maps: Nutrioso 1981, Springerville 1981. The perimeter of critical habitat unit AZ-ASNF-4 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

680425 E 3765075 N

following Arizona/New Mexico state line southerly to

680539 E 3759491 N

continuing to

677965 E 3758327 N
676775 E 3758898 N
676417 E 3760481 N
674827 E 3761971 N
672634 E 3760389 N

following Escudilla Wilderness boundary southerly to

672978 E 3756035 N

continuing to

669499 E 3756265 N
665987 E 3758854 N

669745 E 3761995 N
672424 E 3762163 N
675033 E 3762935 N
677247 E 3763171 N
677421 E 3762403 N
679707 E 3760920 N
680079 E 3762566 N
680064 E 3763961 N
679303 E 3764647 N

to closure at starting point

680425 E 3765075 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF5>TP07DE94.005

BILLING CODE 4310-55-C

AZ-ASNF-5. From Bureau of Land Management maps: Nutrioso 1981, Springerville 1981. The perimeter of critical habitat unit AZ-ASNF-5 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

616256 E 3777733 N
615405 E 3778457 N
615950 E 3780357 N
616710 E 3781189 N
616920 E 3782257 N
615622 E 3783522 N
614218 E 3782577 N
613286 E 3785489 N
614820 E 3787177 N
618199 E 3785692 N
620695 E 3783685 N
623119 E 3782739 N
625388 E 3782312 N
627023 E 3783070 N
630161 E 3783030 N
632551 E 3782737 N
637364 E 3779360 N
638667 E 3775888 N

639374 E 3772902 N
639930 E 3772723 N
639566 E 3771860 N
641281 E 3768498 N
641905 E 3765728 N
641792 E 3764432 N
641804 E 3763631 N
641504 E 3763624 N
641521 E 3762823 N
642877 E 3762841 N
642981 E 3764690 N
643758 E 3764833 N
645650 E 3766066 N
645500 E 3769835 N
646675 E 3771161 N
651680 E 3769281 N
653095 E 3771307 N
657852 E 3768249 N
657409 E 3765581 N
660453 E 3763710 N
661036 E 3761888 N
661101 E 3758901 N
662944 E 3755903 N
662330 E 3754593 N
664976 E 3753701 N
665578 E 3756196 N
667203 E 3756216 N
667350 E 3755003 N
667814 E 3753820 N
668573 E 3751460 N
664751 E 3749599 N
663935 E 3750032 N
663751 E 3751159 N
664071 E 3752242 N
660131 E 3754524 N
659584 E 3756115 N
656736 E 3755237 N
655148 E 3755563 N
654920 E 3756764 N
658234 E 3759654 N
657105 E 3760866 N
655348 E 3761753 N
655446 E 3764697 N
653232 E 3764049 N
653830 E 3768226 N

651837 E 3767879 N
650924 E 3767042 N
651328 E 3765807 N
650409 E 3763637 N
647191 E 3763648 N
646544 E 3764351 N
645205 E 3764490 N
644306 E 3763786 N
643906 E 3758928 N
642095 E 3759835 N
639854 E 3759525 N
638873 E 3758711 N
639697 E 3760647 N
641168 E 3762492 N
641292 E 3764167 N
637780 E 3765976 N
637398 E 3767238 N
638336 E 3769354 N
634456 E 3773473 N
633843 E 3776296 N
631225 E 3776524 N
627207 E 3777429 N
624186 E 3777225 N

following Apache-Sitgreaves National Forest/Fort Apache Indian Reservation boundary westerly, to closure at starting point

616256 E 3777733 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF6>TP07DE94.006

BILLING CODE 4310-55-C

AZ-ASNF-6. From U.S. Geological Survey map: Shop Low 1981. The perimeter of critical habitat unit AZ-ASNF-6 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

506824 E 3796307 N
507091 E 3796651 N
509805 E 3796232 N
511256 E 3794866 N

512428 E 3792995 N
513907 E 3793211 N
515573 E 3794253 N
514106 E 3795424 N
513936 E 3796051 N
514918 E 3797122 N
516683 E 3796314 N
518219 E 3797498 N
520240 E 3797326 N
522082 E 3796703 N
523475 E 3798437 N
523475 E 3798437 N
524173 E 3803336 N
525329 E 3806686 N
527239 E 3807978 N
528926 E 3806664 N
529813 E 3804209 N
532085 E 3802350 N
533926 E 3795835 N
543242 E 3793975 N

following Apache-Sitgreaves National Forest/Fort Apache Indian Reservation and Apache-Sitgreaves National Forest/Tonto National Forest boundary westerly, to closure at starting point

506824 E 3796307 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF7>TP07DE94.007

BILLING CODE 4310-55-C

AZ-ASNF-7. From U.S. Geological Survey map: Show Low 1981; Bureau of Land Management map: Holbrook 1980. The perimeter of critical habitat unit AZ-ASNF-7 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

511031 E 3825384 N
511838 E 3824947 N
512348 E 3822241 N
511860 E 3816877 N
512090 E 3815521 N
513091 E 3816794 N

513778 E 3818301 N
514053 E 3820688 N
517145 E 3822455 N
518770 E 3815716 N
522838 E 3820503 N
524016 E 3821404 N
524803 E 3820902 N
524134 E 3820125 N
524265 E 3816780 N
522847 E 3815231 N
523406 E 3812600 N
522841 E 3811110 N
524714 E 3807732 N
523041 E 3804336 N
519999 E 3803563 N
516393 E 3804114 N
514262 E 3802586 N
511193 E 3799167 N
509127 E 3798828 N
505049 E 3804584 N
505965 E 3805669 N
508184 E 3805991 N
508907 E 3807809 N
509925 E 3809260 N
509903 E 3810337 N
510894 E 3811999 N
511112 E 3814127 N
508918 E 3813888 N
508906 E 3815107 N
510304 E 3817183 N
507109 E 3819212 N
506799 E 3820522 N
507674 E 3821245 N
508254 E 3822482 N
508402 E 3823808 N
509672 E 3824807 N

to closure at starting point

511031 E 3825384 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF8>TP07DE94.008

BILLING CODE 4310-55-C

AZ-ASNF-8. From U.S. Geological Survey maps: Show Low 1981, Payson 1981; Bureau of Land Management maps: Holbrook 1980, Sedona 1980. The perimeter of critical habitat unit AZ-ASNF-8 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

498071 E 3831811 N
497133 E 3830184 N
496542 E 3827744 N
495035 E 3824715 N
495427 E 3822657 N
496795 E 3824498 N
497649 E 3826338 N
501569 E 3830272 N
501669 E 3831476 N
500665 E 3832828 N
503711 E 3831746 N
506230 E 3829593 N
504999 E 3827605 N
503176 E 3827524 N
501267 E 3826550 N
500985 E 3824323 N
501825 E 3822159 N
502378 E 3821427 N
501633 E 3818559 N
502934 E 3816845 N
504033 E 3816425 N
503955 E 3813214 N
502946 E 3813430 N
501176 E 3809595 N
498831 E 3808847 N
499135 E 3806333 N
498842 E 3805166 N
498001 E 3803969 N
499702 E 3802620 N
502239 E 3800153 N
503998 E 3798072 N
505154 E 3798058 N
506119 E 3796457 N

following Apache-Sitgreaves National Forest/Tonto National Forest and Apache-Sitgreaves National Forest/Coconino National Forest boundary westerly and northerly, to closure at starting point

498071 E 3831811 N

The following Universal Transverse Mercator coordinates delineate an area within AZ-ASNF-8 excluded from the critical habitat unit:

493134 E 3813062 N
493177 E 3815226 N
494113 E 3816834 N
494023 E 3817911 N
499290 E 3819810 N
500000 E 3819217 N
500240 E 3818610 N
499920 E 3817097 N
499458 E 3816160 N
495737 E 3813787 N
493134 E 3813062 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF9>TP07DE94.009

BILLING CODE 4310-55-C

AZ-CCNF-1. From U.S. Geological Survey map: Payson 1981; Bureau of Land Management map: Sedona 1980. The perimeter of critical habitat unit AZ-CCNF-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

467656 E 3810849 N
466774 E 3812091 N
467265 E 3813631 N
468965 E 3815239 N
470916 E 3818190 N
471469 E 3819546 N
472899 E 3820815 N
472989 E 3821951 N
473536 E 3822831 N
477135 E 3825608 N
476711 E 3827006 N
476981 E 3829803 N
480121 E 3830569 N
481408 E 3828599 N

479202 E 3825662 N
483296 E 3824844 N
484429 E 3823660 N
484747 E 3824551 N
483764 E 3825090 N
487663 E 3828788 N
489418 E 3831581 N
491814 E 3832043 N
493424 E 3832975 N
497812 E 3833882 N
498220 E 3832071 N

following Apache-Sitgreave National Forest/Coconino National Forest boundary southerly to

487638 E 3804964 N
continuing to

486079 E 3807551 N
488010 E 3810566 N
490129 E 3811716 N
489079 E 3814309 N
490370 E 3815953 N
489296 E 3816671 N
488083 E 3814453 N
486671 E 3813623 N
485449 E 3811207 N
484399 E 3810970 N
482659 E 3810343 N
481104 E 3810793 N
479433 E 3811999 N
478334 E 3815840 N
477042 E 3814911 N
475614 E 3811134 N

following Coconino National Forest/Tonto National Forest boundary westerly, to closure at starting point

467656 E 3810849 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF10>TP07DE94.010

BILLING CODE 4310-55-C

AZ-CCNF-2. From U.S. Geological Survey map: Payson 1981; Bureau of Land Management map: Sedona 1980. The perimeter of critical habitat unit AZ-CCNF-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

452196 E 3826663 N
455413 E 3827141 N
457307 E 3826192 N
459859 E 3825274 N
461266 E 3825474 N
462756 E 3826273 N
463058 E 3828077 N
466081 E 3830265 N
469986 E 3830843 N
470540 E 3829472 N
472317 E 3830342 N
473546 E 3828472 N
472773 E 3825971 N
470980 E 3824898 N
469562 E 3826431 N
469504 E 3827305 N
467090 E 3827440 N
466010 E 3826094 N
466269 E 3822885 N
467812 E 3821561 N
467575 E 3820502 N
468102 E 3819548 N
466845 E 3818428 N
466215 E 3817267 N
465983 E 3816498 N
464948 E 3815529 N
464217 E 3809075 N

following Coconino National Forest/Tonto National Forest boundary southerly to

464542 E 3806101 N

continuing to

462822 E 3805626 N
461447 E 3807352 N
461014 E 3808205 N

following Coconino National Forest/Tonto National Forest boundary northerly, southerly and westerly to

455175 E 3809733 N

continuing to

455350 E 3811266 N
453666 E 3810250 N
452652 E 3810873 N

following Fossil Creek Wilderness boundary northerly to

451932 E 3816971 N

continuing to

450754 E 3819052 N
452343 E 3819762 N
451035 E 3821333 N
450670 E 3822886 N

following Clear Creek Wilderness boundary easterly and westerly, to closure at starting point

452196 E 3826663 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF11>TP07DE94.011

BILLING CODE 4310-55-C

AZ-CCNF-3. From Bureau of Land Management maps: Sedona 1980, Flagstaff 1982. The perimeter of critical habitat unit AZ-CCNF-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

445243 E 3881912 N
446844 E 3881049 N
448293 E 3881155 N
447886 E 3879379 N
449375 E 3877848 N

448861 E 3876329 N
445705 E 3875776 N
447142 E 3874006 N
447638 E 3871685 N
449551 E 3871805 N
450685 E 3873407 N
452312 E 3872409 N
453781 E 3873481 N
455508 E 3872635 N
456289 E 3870804 N
455807 E 3868602 N
454568 E 3866608 N
455557 E 3865528 N
455863 E 3864031 N
455602 E 3861320 N
457831 E 3857143 N
456095 E 3856550 N
457552 E 3854418 N
455793 E 3852249 N
456892 E 3851395 N
457679 E 3847969 N
459466 E 3847434 N
460298 E 3848641 N
460369 E 3852445 N
458916 E 3852969 N
459339 E 3855280 N
459176 E 3861734 N
462532 E 3862959 N
463927 E 3861538 N
464367 E 3859725 N
465539 E 3858693 N
465800 E 3856376 N
468117 E 3853629 N
468343 E 3850615 N
470919 E 3845756 N
469469 E 3839892 N
468556 E 3838842 N
465200 E 3840258 N
464454 E 3841845 N
463473 E 3843118 N
460130 E 3842871 N
456481 E 3841314 N
453247 E 3841042 N
451729 E 3842870 N
453836 E 3844303 N

451873 E 3846132 N
453540 E 3847909 N
453549 E 3849106 N
450853 E 3849130 N
446346 E 3849918 N
447831 E 3850801 N
446909 E 3853131 N
445397 E 3853724 N
445878 E 3855720 N
444988 E 3857744 N
442660 E 3859279 N
443493 E 3864522 N
446792 E 3867451 N
447730 E 3869055 N
445475 E 3871235 N
444843 E 3868998 N
442788 E 3867966 N
440073 E 3867421 N
438747 E 3869007 N
439668 E 3870270 N
439442 E 3871193 N
438650 E 3871939 N
438955 E 3873049 N
438436 E 3874466 N
438974 E 3875593 N
440444 E 3876986 N
440061 E 3880010 N
441902 E 3880273 N
442652 E 3881614 N

to closure at starting point

445243 E 3881912 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF12>TP07DE94.012

BILLING CODE 4310-55-C

AZ-CCNF-4. From Bureau of Land Management maps: Sedona 1980, Flagstaff 1982. The perimeter of critical habitat unit AZ-CCNF-4 is delineated by the following Universal Transverse Mercator (Zone 12)

coordinates:

411162 E 3888459 N
411436 E 3887183 N
413255 E 3886692 N
416682 E 3887651 N
416957 E 3889749 N

following Navajo Army Depot/Coconino National Forest boundary southerly to

423289 E 3889855 N

continuing to

423315 E 3888691 N
422594 E 3887402 N
420066 E 3887145 N
416780 E 3885570 N
417568 E 3884754 N
417380 E 3884099 N
419482 E 3882976 N
419948 E 3881692 N
419576 E 3880489 N
421248 E 3879441 N
422023 E 3880178 N
424066 E 3880374 N
426737 E 3879281 N
428858 E 3878020 N
429990 E 3879762 N
432171 E 3881363 N
431766 E 3883902 N
435940 E 3883827 N
437117 E 3882604 N
437462 E 3878844 N
436914 E 3875266 N
435942 E 3873707 N
433779 E 3871900 N
431540 E 3870725 N

following Red Rocks Secret Mountain Wilderness northerly and westerly to

411269 E 3869688 N

continuing to

411226 E 3869730 N

following Sycamore Canyon Wilderness boundary northerly, to closure at starting point

411162 E 3888459 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF13>TP07DE94.013

BILLING CODE 4310-55-C

AZ-CCNF-5. From Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-CCNF-5 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

459734 E 3893409 N
459673 E 3892086 N
458517 E 3891427 N
457572 E 3891550 N
456473 E 3890074 N
456504 E 3889161 N
454831 E 3886326 N
452865 E 3885379 N
452214 E 3886755 N
451330 E 3888854 N
450408 E 3888256 N
449146 E 3884792 N
446511 E 3886238 N
445087 E 3887424 N
444939 E 3887906 N
444254 E 3888681 N
443059 E 3887998 N
442450 E 3889563 N
443140 E 3891166 N
444243 E 3891381 N
447046 E 3890517 N
448367 E 3889911 N
447995 E 3890893 N
448487 E 3891612 N
451084 E 3892786 N

452448 E 3893121 N
453948 E 3892651 N
455915 E 3891574 N
458865 E 3893408 N

to closure at starting point

459734 E 3893409 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF14>TP07DE94.014

BILLING CODE 4310-55-C

AZ-CCNF-6. From Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-CCNF-6 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

435028 E 3912773 N
434479 E 3913983 N
433341 E 3914482 N
431996 E 3914225 N
430852 E 3913150 N
429612 E 3914508 N
429210 E 3915457 N
430241 E 3916816 N
432363 E 3916770 N
435256 E 3918748 N
438463 E 3916505 N
440939 E 3917584 N
445460 E 3916645 N
446951 E 3916176 N
449588 E 3917258 N
449831 E 3918414 N
450708 E 3919386 N
452448 E 3920670 N
453945 E 3919764 N
454998 E 3918375 N
454735 E 3916974 N
452409 E 3915721 N
448841 E 3915030 N
446665 E 3915461 N
444784 E 3913757 N

446540 E 3912330 N
446253 E 3911251 N
447142 E 3910071 N
445708 E 3909383 N
445563 E 3906164 N
448064 E 3903642 N
445712 E 3902893 N
445185 E 3901438 N
445127 E 3900357 N
444391 E 3900357 N
441720 E 3900757 N
439591 E 3900772 N
439717 E 3903502 N
437343 E 3905240 N
435318 E 3905461 N
434158 E 3905476 N
433598 E 3905563 N
434423 E 3908300 N
435620 E 3909150 N
436254 E 3908992 N

following Kachina Peaks Wilderness boundary, to closure at starting point

435028 E 3912773 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF15>TP07DE94.015

BILLING CODE 4310-55-C

AZ-CCNF-7. From Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-CCNF-7 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

423447 E 3923447 N
423966 E 3923012 N
426475 E 3920186 N
425869 E 3916958 N
423790 E 3915112 N
423490 E 3915152 N
following Coconino National Forest/Kaibab National Forest boundary

northerly, to closure at starting point

423447 E 3923447 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF16>TP07DE94.016

BILLING CODE 4310-55-C

AZ-CRNF-10. From Bureau of Land Management map: Tucson 1990. The perimeter of critical habitat unit AZ-CRNF-10 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

514720 E 3588478 N
517406 E 3592224 N
521443 E 3593754 N
525972 E 3594746 N
524725 E 3593327 N
525612 E 3591646 N
529708 E 3592347 N
530274 E 3590233 N
531194 E 3589130 N
532946 E 3587566 N
532710 E 3584774 N
532877 E 3583185 N
532555 E 3580921 N
530900 E 3578861 N
529826 E 3577993 N
527068 E 3578404 N
525820 E 3579410 N

following Pusch Ridge Wilderness boundary northerly and westerly, to closure at starting point

514720 E 3588478 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF17>TP07DE94.017

BILLING CODE 4310-55-C

AZ-CRNF-13. From Bureau of Land Management maps: Safford 1973, Mammoth 1986. The perimeter of critical habitat unit AZ-CRNF-13 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

590057 E 3627151 N
591756 E 3626497 N
595044 E 3624654 N
600186 E 3624284 N
605383 E 3624819 N
607357 E 3624057 N
609047 E 3623746 N
612568 E 3617718 N
611712 E 3614673 N
612512 E 3613234 N
614484 E 3611466 N
614853 E 3609054 N
612871 E 3607735 N
611623 E 3607421 N
608687 E 3607524 N
607095 E 3608184 N
605255 E 3610406 N
600901 E 3612880 N
599856 E 3614090 N
598289 E 3613576 N
596460 E 3615603 N
594635 E 3617134 N
592085 E 3617511 N
590035 E 3618287 N
587186 E 3620872 N
587461 E 3622254 N
586187 E 3622768 N
585169 E 3624946 N
588094 E 3626103 N

to closure at starting point
590057 E 3627151 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF18>TP07DE94.018

BILLING CODE 4310-55-C

AZ-KANF-1. From U.S. Geological Survey map: Williams 1983. Bureau of Land Management maps: Flagstaff 1982,Prescott 1981. The perimeter of critical habitat unit AZ-KANF-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

393244 E 3874603 N
390878 E 3877037 N
391959 E 3879302 N
388817 E 3877612 N
388723 E 3879279 N
389856 E 3880231 N
390296 E 3882856 N
392046 E 3884681 N
392442 E 3886669 N
394341 E 3887323 N
396798 E 3886537 N
397322 E 3885259 N
400238 E 3885629 N
401329 E 3884831 N
402063 E 3882963 N
403192 E 3882132 N
403667 E 3880646 N
405611 E 3879116 N
406536 E 3880126 N
409130 E 3878019 N
409336 E 3879301 N
410343 E 3880607 N
410179 E 3882883 N
410329 E 3883885 N
406430 E 3888239 N
406180 E 3889105 N
407963 E 3888660 N
409434 E 3889268 N
411007 E 3888733 N

following Sycamore Canyon Wilderness boundary southerly and westerly to

402127 E 3872864 N

following Kaibab National Forest/Prescott National Forest boundary northerly and westerly to

400284 E 3873826 N

following Sycamore Canyon Wilderness boundary northerly, westerly and southerly to

399925 E 3873841 N

following Kaibab National Forest/Prescott National Forest boundary westerly to

399214 E 3873871 N

following Sycamore Canyon Wilderness boundary northerly, westerly and southerly to

398265 E 3873932 N

following Kaibab National Forest/Prescott National Forest boundary to

397474 E 3874002 N

following Sycamore Canyon Wilderness boundary northerly to

397346 E 3874205 N
following Kaibab National Forest/Prescott National Forest boundary westerly, to closure at starting point

393244 E 3874603 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF19>TP07DE94.019

BILLING CODE 4310-55-C

AZ-KANF-2. From U.S. Geological Survey map: Williams 1983. The perimeter of critical habitat unit AZ-KANF-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

391337 E 3898885 N
392197 E 3898866 N
393469 E 3897059 N
392786 E 3893444 N
392561 E 3891157 N

392089 E 3890335 N
391012 E 3889902 N
389037 E 3889687 N
387093 E 3888770 N
384827 E 3888706 N
381768 E 3890009 N
382694 E 3891151 N
384517 E 3891866 N
385717 E 3891535 N
387591 E 3893519 N
387860 E 3895106 N
387037 E 3896445 N
388106 E 3898035 N
388192 E 3898783 N
388945 E 3898230 N

to closure at starting point

391337 E 3898885 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF20>TP07DE94.020

BILLING CODE 4310-55-C

AZ-KANF-3. From U.S. Geological Survey map: Williams 1983, Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-KANF-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:
408401 E 3914757 N
410056 E 3914738 N
413186 E 3913953 N
412899 E 3911497 N
414512 E 3910270 N
413325 E 3908617 N
410384 E 3907681 N
407007 E 3908927 N
405528 E 3911560 N
406663 E 3913649 N

to closure at starting point

408401 E 3914757 N
BILLING CODE 4310-55-P

<GRAPHIC><TIF21>TP07DE94.021

BILLING CODE 4310-55-C

AZ-KANF-4. From Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-KANF-4 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

423490 E 3915152 N
419476 E 3915782 N
416778 E 3918671 N
417490 E 3919313 N
417519 E 3921286 N
416499 E 3921001 N
414217 E 3922320 N
414536 E 3923959 N
414978 E 3924928 N
415767 E 3925613 N
417733 E 3926720 N
419623 E 3926585 N
422156 E 3926511 N
423026 E 3924940 N
422859 E 3923967 N
423447 E 3923447 N

following Kaibab National Forest/Coconino National Forest boundary southerly, to closure at starting point

423490 E 3915152 N
BILLING CODE 4310-55-P

<GRAPHIC><TIF22>TP07DE94.022

BILLING CODE 4310-55-C

AZ-KANF-5. From U.S. Geological Survey map: Tuba City 1983; Bureau of Land Management maps: Fredonia 1978, Grand Canyon 1984. The perimeter of critical habitat unit AZ-KANF-5 is delineated by

the following Universal Transverse Mercator (Zone 12) coordinates:

374340 E 4032182 N
372772 E 4036716 N
372861 E 4042136 N
373921 E 4046988 N
375933 E 4047114 N
378425 E 4044855 N
377283 E 4041540 N
378765 E 4037085 N
381370 E 4036595 N
385297 E 4037911 N
381311 E 4040592 N
378990 E 4048457 N
379629 E 4049528 N
381749 E 4049858 N
384816 E 4048615 N
387619 E 4046991 N
390729 E 4043286 N
393869 E 4044877 N
392574 E 4052611 N
396078 E 4059372 N
399413 E 4059180 N
400905 E 4053771 N
402409 E 4049754 N
403748 E 4044333 N
405368 E 4043124 N
406708 E 4036472 N
406776 E 4032955 N
408595 E 4025453 N
410483 E 4021820 N

following Kaibab National Forest/Grand Canyon National Park boundary westerly and northerly to

406200 E 4021704 N

continuing to

405568 E 4022995 N
405347 E 4025105 N
403567 E 4025847 N
402161 E 4027181 N
401772 E 4030093 N
402210 E 4031873 N

401091 E 4035788 N
401741 E 4039765 N
399772 E 4039788 N
397757 E 4040442 N
397368 E 4038870 N
398119 E 4037351 N
397423 E 4034404 N
396248 E 4030950 N
395875 E 4028394 N
397297 E 4023415 N

following Kaibab National Forest/Grand Canyon National Park boundary westerly and northerly, to closure at starting point

374340 E 4032182 N
BILLING CODE 4310-55-P

<GRAPHIC><TIF23>TP07DE94.023

BILLING CODE 4310-55-C

AZ-NAIR-1. From U.S. Geological Survey maps: Rock Point 1986, Canyon de Chelly 1984; Bureau of Land Management maps: Gallup 1981, Toadlena 1980. The perimeter of critical habitat unit AZ-NAIR-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

664498 E 4083196 N
667700 E 4082440 N
670789 E 4080812 N
672895 E 4077576 N
672548 E 4073349 N
669062 E 4073059 N
667261 E 4071276 N
667407 E 4069845 N
665785 E 4069188 N
664321 E 4067036 N
659333 E 4065894 N
658950 E 4062981 N
660292 E 4058522 N
658366 E 4055377 N
657688 E 4050045 N
657809 E 4047830 N

658727 E 4045611 N
661606 E 4044865 N
664085 E 4046660 N
665863 E 4047007 N
667386 E 4044565 N
667339 E 4041179 N
668962 E 4039593 N
671304 E 4039206 N
675106 E 4040824 N
676943 E 4039232 N
678611 E 4042165 N
680582 E 4043568 N
683292 E 4043334 N
684182 E 4041489 N
681529 E 4040110 N
678117 E 4036486 N
681766 E 4033841 N
679591 E 4028071 N
681238 E 4025027 N
684893 E 4021019 N
687201 E 4017013 N
687606 E 4014570 N
687022 E 4012032 N
688686 E 4011836 N
688713 E 4008089 N
692252 E 4006636 N
691136 E 4000425 N
693455 E 3999019 N
695658 E 3993691 N
697165 E 3993464 N
699146 E 3987141 N
701404 E 3981509 N
702348 E 3975511 N
697340 E 3974603 N
695249 E 3971528 N
693112 E 3973167 N
691507 E 3973078 N
690664 E 3971110 N
691780 E 3967833 N
689837 E 3962520 N
687004 E 3958869 N
684568 E 3956741 N
682344 E 3955677 N
680519 E 3955581 N
680750 E 3962194 N

680638 E 3967650 N
680106 E 3968809 N
680340 E 3972544 N
678777 E 3974290 N
679592 E 3976002 N
681834 E 3974549 N
685189 E 3974215 N
686727 E 3975646 N
685784 E 3978339 N
685615 E 3982153 N
684326 E 3986144 N
684971 E 3989539 N
684851 E 3992441 N
679159 E 4000412 N
676596 E 3999936 N
675715 E 3996500 N
669597 E 3996016 N
668510 E 3996997 N
670047 E 3999512 N
673451 E 4000906 N
676492 E 4001043 N
674489 E 4002078 N
672797 E 4005668 N
676546 E 4009755 N
675486 E 4012991 N
673089 E 4011645 N
671694 E 4012522 N
670765 E 4015043 N
668707 E 4015795 N
667336 E 4019085 N
665281 E 4019463 N
662482 E 4022942 N
661504 E 4027433 N
662238 E 4031362 N
661149 E 4033665 N
650331 E 4045040 N
649327 E 4048815 N
652609 E 4052722 N
653035 E 4055924 N
650944 E 4061684 N
655488 E 4064322 N
656411 E 4066910 N
657653 E 4069487 N
657108 E 4070798 N
656859 E 4073492 N

658455 E 4076275 N
657133 E 4078326 N
655710 E 4078670 N
654850 E 4079808 N
656438 E 4082748 N
659579 E 4082483 N

to closure at starting point

664498 E 4083196 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF24>TP07DE94.024

BILLING CODE 4310-55-C

AZ-NAIR-2. From U.S. Geological Survey map: Ganado 1984. The perimeter of critical habitat unit AZ-NAIR-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

667884 E 3954269 N
670060 E 3954258 N
671888 E 3953041 N
668950 E 3947696 N
668783 E 3944993 N
671701 E 3938375 N
671481 E 3936605 N
668501 E 3936337 N
663963 E 3943110 N
663460 E 3947889 N

to closure at starting point

667884 E 3954269 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF25>TP07DE94.025

BILLING CODE 4310-55-C

AZ-NAIR-3. From U.S. Geological Survey map: Ganado 1984. The perimeter of critical habitat unit AZ-NAIR-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

654984 E 3967813 N
657267 E 3967366 N
655791 E 3964771 N
657580 E 3964312 N
657683 E 3962446 N
659049 E 3960488 N
658863 E 3959065 N
655226 E 3957843 N
654890 E 3956304 N
652494 E 3956225 N
654617 E 3954350 N
658167 E 3953829 N
659118 E 3953119 N
658090 E 3951809 N
654278 E 3951170 N
651366 E 3953186 N
649301 E 3956167 N
645453 E 3955865 N
644842 E 3956413 N
646674 E 3960529 N
648692 E 3963284 N
652118 E 3967455 N

to closure at starting point

654984 E 3967813 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF26>TP07DE94.026

BILLING CODE 4310-55-C

AZ-NAIR-4. From U.S. Geological Survey maps: Ganado 1984, Canyon de Chelly 1984. The perimeter of critical habitat unit AZ-NAIR-4 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

651340 E 4004495 N
652317 E 4003508 N

652011 E 4000874 N
656314 E 4001885 N
657299 E 4001028 N
659530 E 4003744 N
661180 E 4003853 N
664610 E 4002532 N
665312 E 3999944 N
666229 E 3998907 N
666049 E 3997832 N
664834 E 3999072 N
662934 E 3998499 N
660966 E 3999110 N
658946 E 3995380 N
653165 E 3996867 N
655439 E 3993748 N
656249 E 3989397 N
659860 E 3989917 N
660452 E 3986684 N
658866 E 3985885 N
658971 E 3983345 N
657330 E 3983340 N
654921 E 3984844 N
653725 E 3985917 N
653499 E 3988550 N
651463 E 3992664 N
650365 E 3991442 N
647590 E 3994126 N
648099 E 3996480 N
648080 E 3999867 N
646260 E 4000363 N
646348 E 4002790 N

to closure at starting point

651340 E 4004495 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF27>TP07DE94.027

BILLING CODE 4310-55-C

AZ-NAIR-5. From U.S. Geological Survey map: Canyon de Chelly 1984. The perimeter of critical habitat unit AZ-NAIR-5 is delineated by the following Universal Transverse Mercator (Zone 12)

coordinates:

651188 E 4016192 N
653417 E 4016047 N
652125 E 4013683 N
654146 E 4014464 N
660136 E 4015777 N
660865 E 4014423 N
658293 E 4012030 N
650992 E 4010081 N
649132 E 4011045 N
648743 E 4013154 N
649349 E 4015342 N

to closure at starting point

651188 E 4016192 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF28>TP07DE94.028

BILLING CODE 4310-55-C

AZ-NAMR-1. From Bureau of Land Management map: Flagstaff 1982. The perimeter of critical habitat unit AZ-NAMR-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

416959 E 3890683 N
418988 E 3891366 N
420643 E 3891032 N
422168 E 3890950 N
423618 E 3890551 N
423289 E 3889855 N

following Navajo Army Depot/Coconino National Forest boundary westerly to

416957 E 3889749 N

to closure at starting point

416959 E 3890683 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF29>TP07DE94.029

BILLING CODE 4310-55-C

AZ-PRNF-1. From Bureau of Land Management map: Bradshaw Mountains 1981. The perimeter of critical habitat unit AZ-PRNF-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

379607 E 3781394 N
378315 E 3780049 N
376714 E 3780674 N
376229 E 3781860 N
377019 E 3783259 N
376019 E 3783268 N
374644 E 3784389 N
374453 E 3786485 N
373242 E 3787721 N
373723 E 3788587 N
370106 E 3789062 N
370033 E 3790473 N
371164 E 3792144 N
372624 E 3791987 N
373472 E 3791293 N
377033 E 3791700 N
377804 E 3790925 N
377777 E 3789829 N
376874 E 3788019 N
377994 E 3786380 N

following Castle Creek Wilderness boundary southerly, to closure at starting point

379607 E 3781394 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF30>TP07DE94.030

BILLING CODE 4310-55-C

AZ-PRNF-2. From Bureau of Land Management maps: Bradshaw Mountains 1981, Prescott 1981. The perimeter of critical habitat unit AZ-PRNF-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

369367 E 3821419 N
370700 E 3818807 N
373441 E 3819206 N
374337 E 3818691 N
374840 E 3818005 N
377325 E 3817403 N
376590 E 3814870 N
376990 E 3813719 N
378680 E 3812052 N
378890 E 3810879 N
380474 E 3809601 N
379956 E 3808246 N
379413 E 3805464 N
378449 E 3804449 N
377139 E 3804495 N
375262 E 3805870 N
373673 E 3805263 N
373479 E 3804099 N
374005 E 3802354 N
373618 E 3801656 N
371668 E 3803387 N
370565 E 3801651 N
369753 E 3801277 N
369153 E 3804012 N
367306 E 3803214 N
366815 E 3805986 N
365380 E 3806547 N
363995 E 3807564 N
367475 E 3809108 N
364461 E 3810084 N
364031 E 3811508 N
363071 E 3813118 N
363576 E 3814387 N
365267 E 3815182 N
365307 E 3813851 N
368227 E 3813409 N
368536 E 3814397 N
368690 E 3816514 N

367237 E 3817815 N
366243 E 3816746 N
364996 E 3816169 N
363465 E 3817110 N
362515 E 3815517 N
360540 E 3816671 N
358831 E 3816213 N
357285 E 3816978 N
356961 E 3818502 N
357271 E 3819069 N
356680 E 3820827 N
354515 E 3822268 N
353028 E 3823983 N
355499 E 3827261 N
356891 E 3827377 N
356441 E 3825497 N
359637 E 3823729 N
360788 E 3820274 N
362688 E 3819820 N

following Prescott National Forest boundary easterly, to closure at starting point

369367 E 3821419 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF31>TP07DE94.031

BILLING CODE 4310-55-C

AZ-PRNF-3. From Bureau of Land Management map: Prescott 1981. The perimeter of critical habitat unit AZ-PRNF-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

393903 E 3844494 N
397673 E 3843175 N
399213 E 3842030 N
398907 E 3839370 N
399181 E 3837313 N
397845 E 3836328 N
394730 E 3835247 N
393417 E 3836764 N
392080 E 3836937 N

391844 E 3837620 N
392635 E 3837778 N
391622 E 3839567 N
392098 E 3842762 N
390251 E 3844860 N
390372 E 3844893 N

following Woodchute Wilderness boundary easterly and northerly, to closure at starting point

393903 E 3844494 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF32>TP07DE94.032

BILLING CODE 4310-55-C

AZ-SCIR-1. From Bureau of Land Management map: Nutrioso 1981. The perimeter of critical habitat unit AZ-SCIR-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

639681 E 3716228 N
638500 E 3715650 N
636471 E 3716161 N
633869 E 3715216 N
628910 E 3713886 N
627363 E 3713761 N
623026 E 3715071 N

following Fort Apache Indian Reservation/San Carlos Indian Reservation boundary easterly and northerly to

639570 E 3724456 N

to closure at starting point

639681 E 3716228 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF33>TP07DE94.033

BILLING CODE 4310-55-C

AZ-SCIR-2. From Bureau of Land Management maps: Nutrioso 1981, Clifton 1986, Globe 1979, Seneca 1992; U.S. Geological Survey map: Seneca 1992. The perimeter of critical habitat unit AZ-SCIR-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

592922 E 3707844 N
595486 E 3704471 N
596208 E 3702896 N
598409 E 3702786 N
600267 E 3701278 N
606352 E 3695376 N
608581 E 3694543 N
611204 E 3694765 N
613762 E 3692888 N
615151 E 3692370 N
615372 E 3691301 N
616366 E 3689130 N
617798 E 3688319 N
619439 E 3685349 N
620057 E 3683885 N
622357 E 3681138 N
622809 E 3680112 N
624123 E 3679490 N
624217 E 3677371 N
622826 E 3677973 N
622063 E 3677415 N
620861 E 3677722 N
619076 E 3679752 N
617848 E 3680413 N
617098 E 3682507 N
615311 E 3685796 N
613781 E 3685423 N
612239 E 3685874 N
608966 E 3687384 N
609498 E 3689571 N
607426 E 3691554 N
605695 E 3692740 N
603396 E 3689726 N
600242 E 3693293 N
600602 E 3695175 N
600624 E 3696137 N
596036 E 3699545 N

591315 E 3701454 N
589631 E 3703791 N
590313 E 3705624 N
591421 E 3707026 N

to closure at starting point

592922 E 3707844 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF34>TP07DE94.034

BILLING CODE 4310-55-C

AZ-SCIR-3. From U.S. Geological Survey map: Seneca 1992. The perimeter of critical habitat unit AZ-SCIR-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

561642 E 3734349 N
562805 E 3732706 N
565002 E 3731514 N
567723 E 3729519 N
567785 E 3728057 N
569282 E 3727782 N
572701 E 3728025 N
573940 E 3726781 N
575159 E 3724075 N
576532 E 3723781 N
575679 E 3721453 N
574362 E 3719699 N
574240 E 3717304 N
571051 E 3717524 N
568455 E 3716006 N
567796 E 3716889 N
566895 E 3719836 N
564774 E 3719298 N
562330 E 3720763 N
560874 E 3720650 N
559494 E 3721335 N
557490 E 3719902 N
555012 E 3720550 N
551623 E 3720047 N
549710 E 3721396 N

547444 E 3724567 N
547779 E 3726919 N
551948 E 3726307 N
552467 E 3728968 N
554753 E 3731167 N
556667 E 3730630 N
557933 E 3732790 N
559510 E 3734160 N

to closure at starting point

561642 E 3734349 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF35>TP07DE94.035

BILLING CODE 4310-55-C

AZ-TONF-1. From U.S. Geological Survey maps: Show Low 1981, Payson 1981. The perimeter of critical habitat unit AZ-TONF-1 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

520080 E 3777912 N
517953 E 3778757 N
518382 E 3780284 N
519127 E 3781453 N
518841 E 3783084 N
517987 E 3781609 N
514700 E 3780485 N
509300 E 3780736 N
510523 E 3781950 N
503673 E 3789186 N
500000 E 3790869 N
498153 E 3791713 N
496906 E 3793778 N
496858 E 3795523 N
499216 E 3795390 N
500000 E 3796592 N
500401 E 3797081 N
500000 E 3798029 N
499152 E 3799129 N
498789 E 3799137 N

496139 E 3797134 N
493403 E 3798445 N
491901 E 3799803 N
491857 E 3801486 N
493500 E 3803906 N

following Apache-Sitgreaves National Forest/Tonto National Forest boundary to

520043 E 3795178 N

following Tonto National Forest/Fort Apache Indian Reservation boundary, to closure at starting point

520080 E 3777912 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF36>TP07DE94.036

BILLING CODE 4310-55-C

AZ-TONF-2. From U.S. Geological Survey map: Payson 1981. The perimeter of critical habitat unit AZ-TONF-2 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

480368 E 3807751 N
480144 E 3807214 N
478574 E 3806656 N
477768 E 3805723 N
476383 E 3806351 N
476712 E 3808891 N
475645 E 3809345 N
474973 E 3807656 N
474505 E 3806301 N
473367 E 3805588 N
472338 E 3804536 N
471097 E 3804268 N
466031 E 3805227 N
465374 E 3807892 N
465323 E 3807396 N
464558 E 3806130 N

following Coconino National Forest/Tonto National Forest westerly,

northerly and easterly, to closure at starting point

480368 E 3807751 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF37>TP07DE94.037

BILLING CODE 4310-55-C

AZ-TONF-3. From U.S. Geological Survey map: Payson 1981. The perimeter of critical habitat unit AZ-TONF-3 is delineated by the following Universal Transverse Mercator (Zone 12) AZ-TONF-3 coordinates:

460842 E 3808536 N
459306 E 3808634 N
457269 E 3805862 N
456714 E 3805864 N
456712 E 3804231 N
455028 E 3803322 N
451031 E 3806378 N
455097 E 3806301 N
455175 E 3809733 N

following Coconino National Forest/Tonto National Forest boundary easterly, southerly and northerly, to closure at starting point

460842 E 3808536 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF38>TP07DE94.038

BILLING CODE 4310-55-C

AZ-TONF-5. From U.S. Geological Survey map: Seneca 1992, Bureau of Land Management map: Theodore Roosevelt Lake 1981. The perimeter of critical habitat unit AZ-TONF-5 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

493068 E 3747729 N
492781 E 3749030 N
489666 E 3752724 N
486104 E 3751938 N
484964 E 3754141 N
485428 E 3758105 N
487212 E 3759579 N
494623 E 3758736 N
501055 E 3758611 N
501087 E 3756530 N
502617 E 3755173 N
505523 E 3755297 N
507045 E 3754065 N

following Sierra Ancha Wilderness boundary southerly to

506455 E 3735628 N

continuing to

505584 E 3735094 N
504686 E 3735639 N
503384 E 3737575 N
501477 E 3739176 N
499472 E 3740415 N
498265 E 3743160 N
495941 E 3744432 N

following Salome Wilderness boundary northerly, westerly and southerly, to closure at starting point

493068 E 3747729 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF39>TP07DE94.039

<GRAPHIC><TIF40>TP07DE94.040

BILLING CODE 4310-55-C

CO-BLM-4. From Bureau of Land Management map: Antonito 1985. The

perimeter of critical habitat unit CO-BLM-4 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

325228 E 4100138 N
327504 E 4098823 N
328541 E 4096404 N
following Colorado/New Mexico state line westerly to

325319 E 4096470 N

following Bureau of Land Management/Southern Ute Indian Reservation northerly, to closure at starting point

325228 E 4100138 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF41>TP07DE94.041

BILLING CODE 4310-55-C

CO-SJNF-1. From Bureau of Land Management map: Durango 1983. The perimeter of critical habitat unit CO-SJNF-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

276898 E 4113198 N
279427 E 4117982 N
281866 E 4121940 N
284899 E 4119341 N
286870 E 4113038 N

following San Juan National Forest/Southern Ute Indian Reservation boundary westerly, to closure at starting point

276898 E 4113198 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF42>TP07DE94.042

BILLING CODE 4310-55-C

CO-SJNF-2. From Bureau of Land Management map: Durango 1983. The perimeter of critical habitat unit CO-SJNF-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

293946 E 4112846 N
294050 E 4114193 N
298337 E 4116308 N
299838 E 4116295 N
302335 E 4114651 N

following San Juan National Forest/Southern Ute Indian Reservation boundary southerly and westerly, to closure at starting point

293946 E 4112846 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF43>TP07DE94.043

BILLING CODE 4310-55-C

CO-SJNF-3. From Bureau of Land Management maps: Antonito 1985, Durango 1983. The perimeter of critical habitat unit CO-SJNF-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

327034 E 4117356 N
328126 E 4116497 N
327811 E 4115734 N
330405 E 4116066 N
332447 E 4115985 N
334230 E 4114115 N
333150 E 4110836 N
332918 E 4108890 N
331199 E 4109202 N
329246 E 4110075 N
325805 E 4110111 N
322907 E 4112126 N
320660 E 4112125 N
318375 E 4113046 N
320753 E 4115731 N
321571 E 4116113 N
325444 E 4117381 N

to closure at starting point

327034 E 4117356 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF44>TP07DE94.044

BILLING CODE 4310-55-C

CO-SUIR-1. From Bureau of Land Management map: Durango 1983. The perimeter of critical habitat unit CO-SUIR-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

276898 E 4113198 N

following San Juan National Forest/Southern Ute Indian Reservation boundary easterly to

286870 E 4113038 N

continuing to

287440 E 4112429 N
286996 E 4110380 N
285580 E 4106485 N
282835 E 4105848 N
281908 E 4107325 N
279969 E 4105900 N
278257 E 4106674 N
277148 E 4108267 N
276811 E 4109992 N

to closure at starting point

276898 E 4113198 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF45>TP07DE94.045

BILLING CODE 4310-55-C

CO-SUIR-2. From Bureau of Land Management map: Durango 1983. The perimeter of critical habitat unit CO-SUIR-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

302291 E 4113405 N
302771 E 4113393 N
303788 E 4109966 N
302766 E 4107219 N
298976 E 4110286 N
297105 E 4108500 N
297948 E 4105482 N
297299 E 4101803 N
294405 E 4100647 N
292399 E 4100827 N
290577 E 4104115 N
289305 E 4104285 N
286967 E 4106271 N
288474 E 4109259 N
290243 E 4110499 N
293946 E 4112846 N

following San Juan National Forest/Southern Ute Indian Reservation boundary easterly and northerly, to closure at starting point

302291 E 4113405 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF46>TP07DE94.046

BILLING CODE 4310-55-C

CO-SUIR-3. From Bureau of Land Management maps: Durango 1983, Antonito 1985. The perimeter of critical habitat unit CO-SUIR-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

305023 E 4096922 N
306518 E 4098292 N
310805 E 4097689 N
312377 E 4098203 N
312040 E 4099067 N
310649 E 4100042 N
309901 E 4101607 N

311897 E 4102041 N
314005 E 4103047 N
316438 E 4102121 N
321250 E 4102023 N
322490 E 4100643 N
325228 E 4100138 N

following Southern Ute Indian Reservation/Bureau of Land Management boundary southerly to

325319 E 4096470 N

following New Mexico/Colorado state line westerly, to closure at starting point

305023 E 4096922 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF47>TP07DE94.047

<GRAPHIC><TIF48>TP07DE94.048

BILLING CODE 4310-55-C

NM-BLM-1. From Bureau of Land Management maps: Chama 1981, Abiquiu 1978. The perimeter of critical habitat unit NM-BLM-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

346419 E 4043099 N
346284 E 4039952 N
347142 E 4039142 N
347955 E 4039103 N
348702 E 4038302 N
351972 E 4038225 N
351962 E 4037446 N

following Bureau of Land Management/U.S. Forest Service boundary westerly and northerly, to closure at starting point

340889 E 4041655 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF49>TP07DE94.049

BILLING CODE 4310-55-C

NM-BLM-2. From Bureau of Land Management map: Zuni 1981. The perimeter of critical habitat unit NM-BLM-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

731662 E 3922977 N
733028 E 3921747 N
735176 E 3921726 N
736182 E 3923060 N
737711 E 3922677 N
738046 E 3921256 N

following Bureau of Land Management boundary westerly, to closure at starting point

731662 E 3922977 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF50>TP07DE94.050

BILLING CODE 4310-55-C

NM-BLM-3. From Bureau of Land Management map: Taos 1983. The perimeter of critical habitat unit NM-BLM-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

435597 E 4016742 N

following Bureau of Land Management boundary southerly to

431185 E 4010355 N

continuing to

430666 E 4010128 N

430453 E 4011203 N
431048 E 4012226 N
431188 E 4013213 N
432334 E 4013374 N
435232 E 4016894 N

to closure at starting point

435597 E 4016742 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF51>TP07DE94.051

BILLING CODE 4310-55-C

NM-BLM-4. From U.S. Geological Survey map: Navajo Reservoir 1980. The perimeter of critical habitat unit NM-BLM-4 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

292948 E 4063398 N

following Bureau of Land Management/U.S. Forest Service boundary southerly to

294282 E 4052894 N

continuing to

293223 E 4053664 N
293429 E 4055209 N
293724 E 4055959 N
293704 E 4056853 N
292360 E 4057778 N
292725 E 4059240 N
292739 E 4060923 N
292452 E 4062412 N

to closure at starting point

292948 E 4063398 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF52>TP07DE94.052

BILLING CODE 4310-55-C

NM-BLM-5. From Bureau of Land Management map: Chama 1981. The perimeter of critical habitat unit NM-BLM-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

326880 E 4096438 N
324833 E 4093549 N
323285 E 4092583 N
323436 E 4096510 N

following New Mexico/Colorado state line easterly, to closure at starting point

326880 E 4096438 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF53>TP07DE94.053

BILLING CODE 4310-55-C

NM-CANF-1. From U.S. Geological Survey map: Navajo Reservoir 1980. The perimeter of critical habitat unit NM-CANF-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

292662 E 4097213 N
297259 E 4095511 N
299622 E 4095691 N
300408 E 4095355 N
300393 E 4093220 N
297305 E 4089973 N
292080 E 4089934 N
291350 E 4090831 N
291409 E 4092222 N
288869 E 4093424 N

288932 E 4096317 N
290066 E 4097276 N

following New Mexico/Colorado state line, to closure at starting point

292662 E 4097213 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF54>TP07DE94.054

BILLING CODE 4310-55-C

NM-CANF-2. From U.S. Geological Survey map: Navajo Reservoir 1980. The perimeter of critical habitat unit NM-CANF-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

295082 E 4082660 N
297776 E 4080896 N
300371 E 4081841 N
302444 E 4081290 N
300381 E 4079391 N
300540 E 4076496 N
299782 E 4074701 N
300306 E 4072919 N
298848 E 4071068 N
297536 E 4071675 N
295016 E 4066624 N
293046 E 4067611 N
293185 E 4070746 N
293085 E 4073778 N
295407 E 4075432 N
294514 E 4080505 N

to closure at starting point

295082 E 4082660 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF55>TP07DE94.055

BILLING CODE 4310-55-C

NM-CANF-3. From U.S. Geological Survey map: Belen 1980. The perimeter of critical habitat unit NM-CANF-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

292948 E 4063398 N
294260 E 4064084 N
296187 E 4063544 N
296443 E 4064614 N
297497 E 4063863 N
298324 E 4064351 N
299576 E 4063596 N
299444 E 4062332 N
299470 E 4060484 N
300019 E 4057496 N
300070 E 4056441 N
299294 E 4054812 N
297627 E 4054248 N
297682 E 4052739 N
297100 E 4051759 N
294282 E 4052894 N

following U.S. Forest Service/Bureau of Land Management boundary northerly and westerly, to closure at starting point

292948 E 4063398 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF56>TP07DE94.056

BILLING CODE 4310-55-C

NM-CANF-4. From Bureau of Land Management map: San Mateo Mountains 1981. The perimeter of critical habitat unit NM-CANF-4 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

373579 E 4032718 N

373914 E 4032004 N
375963 E 4031537 N
377209 E 4030945 N
375112 E 4027525 N
376850 E 4026389 N
377866 E 4026257 N
378929 E 4026999 N
382826 E 4027565 N
383632 E 4026954 N
383564 E 4024626 N
381533 E 4023981 N
377977 E 4021387 N
375487 E 4021263 N
368275 E 4027898 N
368252 E 4028816 N
370641 E 4029045 N

to closure at starting point

373579 E 4032718 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF57>TP07DE94.057

BILLING CODE 4310-55-C

NM-CANF-5. From Bureau of Land Management maps: Chama 1981, Abiquiu 1978. The perimeter of critical habitat unit NM-CANF-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

392165 E 4042116 N
392771 E 4041194 N
392502 E 4040310 N
392552 E 4039703 N
394067 E 4039672 N
395495 E 4038541 N
396093 E 4038554 N
397455 E 4038191 N
397675 E 4037007 N
399212 E 4036861 N
398731 E 4035381 N

399528 E 4033901 N
399143 E 4033004 N
398240 E 4034355 N
393294 E 4035957 N
392557 E 4036672 N
389798 E 4037925 N
389045 E 4040330 N
390388 E 4041727 N

to closure at starting point

392165 E 4042116 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF58>TP07DE94.058

BILLING CODE 4310-55-C

NM-CANF-6. From Bureau of Land Management maps: Chama 1981, Abiquiu 1978. The perimeter of critical habitat unit NM-CANF-6 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

400629 E 4053646 N
401323 E 4052637 N
404028 E 4052467 N
404995 E 4052360 N
406784 E 4051680 N
407505 E 4051521 N
409065 E 4049207 N
407083 E 4046378 N
408093 E 4044589 N
408313 E 4041941 N
407405 E 4041579 N
408094 E 4040090 N
407950 E 4039697 N
407481 E 4039359 N
406107 E 4039853 N
402332 E 4040006 N
402463 E 4041778 N
402793 E 4043074 N
403456 E 4044569 N

402743 E 4045301 N
402386 E 4047800 N
401172 E 4048167 N
400955 E 4049612 N
402481 E 4050478 N
400818 E 4051764 N
399976 E 4053168 N

to closure at starting point

400629 E 4053646 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF59>TP07DE94.059

BILLING CODE 4310-55-C

NM-CANF-7. From Bureau of Land Management map: Chama 1981. The perimeter of critical habitat unit NM-CANF-7 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

392437 E 4054501 N
393479 E 4054340 N
394189 E 4053268 N
393994 E 4052708 N
395645 E 4051818 N
395465 E 4050786 N
395716 E 4050174 N
395450 E 4048728 N
393561 E 4048143 N
391810 E 4046950 N
391561 E 4046358 N
389765 E 4045293 N
387566 E 4043772 N
386569 E 4043386 N
386043 E 4043654 N
385977 E 4044571 N
385102 E 4046573 N
385464 E 4047126 N
385508 E 4048168 N
385034 E 4050631 N
388071 E 4052483 N

390333 E 4053036 N
391792 E 4052741 N

to closure at starting point

392437 E 4054501 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF60>TP07DE94.060

BILLING CODE 4310-55-C

NM-CANF-8. From Bureau of Land Management map: Taos 1983. The perimeter of critical habitat unit NM-CANF-8 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

444407 E 4011054 N
445887 E 4008664 N
444279 E 4007357 N
443082 E 4005673 N
441761 E 4005440 N
440460 E 4006342 N

following U.S. Forest Service/Picuris Pueblo Indian Reservation boundary northerly and westerly to

432103 E 4010484 N

continuing to

431185 E 4010355 N

following U.S. Forest Service/Bureau of Land Management boundary northerly to

431203 E 4011542 N
432771 E 4011566 N
432763 E 4013194 N
434371 E 4013182 N
434388 E 4014786 N
435575 E 4014778 N
435597 E 4016742 N

following U.S. Forest Service/private boundary southerly and easterly, to closure at starting point

444407 E 4011054 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF61>TP07DE94.061

BILLING CODE 4310-55-C

NM-CANF-9. From Bureau of Land Management map: Taos 1983. The perimeter of critical habitat unit NM-CANF-9 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

455512 E 4025045 N
457328 E 4024532 N
459410 E 4024238 N
462224 E 4024950 N
462542 E 4023399 N
460258 E 4021342 N
463207 E 4020829 N
464505 E 4019697 N
465213 E 4017372 N
462565 E 4017808 N
461610 E 4016116 N
460324 E 4016206 N
460287 E 4017272 N
458816 E 4018216 N
456024 E 4015795 N
456465 E 4014979 N
458818 E 4015289 N
459016 E 4013723 N
462160 E 4013806 N
460937 E 4012312 N
461356 E 4011329 N
459284 E 4011423 N
456901 E 4012856 N
456548 E 4011793 N
455071 E 4010271 N
453844 E 4010493 N
452668 E 4009760 N
453262 E 4009056 N

454097 E 4009245 N
455101 E 4008596 N
456971 E 4009717 N
457457 E 4008461 N
456268 E 4006276 N
454850 E 4006325 N
455075 E 4005214 N
453783 E 4004534 N
451776 E 4006843 N
448730 E 4005100 N
451851 E 4003878 N
451418 E 4002164 N
450288 E 4001636 N
449068 E 4002054 N
448072 E 4002170 N
448108 E 4001741 N
449565 E 3999591 N
449250 E 3997481 N
447518 E 3999597 N
445941 E 3996485 N
445123 E 3996998 N
444804 E 3999718 N
444436 E 4000612 N
446057 E 4002783 N
445135 E 4003397 N
445173 E 4005180 N
447152 E 4007005 N
446887 E 4008469 N
446265 E 4009404 N
446753 E 4010378 N
449689 E 4013555 N
449051 E 4016491 N
450717 E 4019920 N
451921 E 4020145 N
453870 E 4023315 N
455622 E 4022944 N

to closure at starting point

455512 E 4025045 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF62>TP07DE94.062

BILLING CODE 4310-55-C

NM-CANF-10. From Bureau of Land Management map: Wheeler Peak 1982. The perimeter of critical habitat unit NM-CANF-10 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

451209 E 4044786 N
450341 E 4045639 N
449559 E 4045497 N
449568 E 4046718 N
446447 E 4049286 N
445218 E 4050499 N
445051 E 4052090 N
445921 E 4052985 N
447895 E 4053417 N
449038 E 4053158 N
447410 E 4051828 N
449616 E 4050226 N
448444 E 4049495 N
450109 E 4048652 N
449422 E 4047421 N
452282 E 4047642 N
451933 E 4049444 N
453430 E 4048328 N
453097 E 4050127 N
454506 E 4049393 N
454617 E 4050510 N
456941 E 4049618 N

following Wheeler Peak Wilderness boundary westerly, to closure at starting point

451209 E 4044786 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF63>TP07DE94.063

BILLING CODE 4310-55-C

NM-CANF-11. From Bureau of Land Management map: Wheeler Peak

1982. The perimeter of critical habitat unit NM-CANF-11 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

449934 E 4061600 N
450893 E 4061256 N
451826 E 4060010 N
454305 E 4059359 N
456168 E 4057285 N
456506 E 4055714 N
454778 E 4053664 N
452412 E 4055237 N
452737 E 4057797 N
451296 E 4057800 N
449651 E 4059135 N

to closure at starting point

449934 E 4061600 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF64>TP07DE94.064

BILLING CODE 4310-55-C

NM-CANF-12. From Bureau of Land Management map: Wheeler Peak 1982. The perimeter of critical habitat unit NM-CANF-12 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

461765 E 4068754 N
462402 E 4068220 N
460418 E 4066009 N
462591 E 4066191 N
463930 E 4065679 N
463951 E 4066309 N
464310 E 4066361 N
464570 E 4065467 N
465597 E 4066589 N
466161 E 4065507 N
464973 E 4064059 N
467035 E 4065070 N

469435 E 4064792 N
464814 E 4062389 N
463830 E 4063060 N
463528 E 4064473 N
462473 E 4065554 N
459751 E 4064455 N
456110 E 4063618 N
454633 E 4064155 N
454284 E 4063108 N
453272 E 4063325 N
452438 E 4063382 N
452382 E 4064896 N

following Latir Peak Wilderness boundary easterly, to closure at starting point

461765 E 4068754 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF65>TP07DE94.065

BILLING CODE 4310-55-C

NM-CANF-13. From Bureau of Land Management map: Wheeler Peak 1982. The perimeter of critical habitat unit NM-CANF-13 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

477956 E 4060624 N
478355 E 4062603 N
481874 E 4063449 N
480594 E 4064077 N
481798 E 4065299 N
483740 E 4065576 N
484759 E 4064826 N
485401 E 4063425 N
484938 E 4061504 N

following Carson National Forest boundary westerly to

479890 E 4058718 N

continuing to
480326 E 4058415 N
480091 E 4057431 N
478875 E 4057313 N
477861 E 4059530 N
477840 E 4060160 N

to closure at starting point

477956 E 4060624 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF66>TP07DE94.066

BILLING CODE 4310-55-C

NM-CINF-1. From Bureau of Land Management map: Grants 1978. The perimeter of critical habitat unit NM-CINF-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

269326 E 3907440 N

following Cibola National Forest/Cebolleta Grant boundary southerly to

267991 E 3904671 N
266758 E 3903134 N
266501 E 3897545 N
266161 E 3894600 N
264216 E 3894655 N

continuing to

262334 E 3893737 N
261119 E 3893762 N
260229 E 3895120 N
258330 E 3895687 N
256693 E 3897174 N
257127 E 3899398 N
256284 E 3900263 N
256461 E 3909058 N
258282 E 3909860 N

261058 E 3909760 N
262582 E 3911317 N
262071 E 3913672 N
262902 E 3914276 N
265858 E 3913361 N
267626 E 3911746 N
268871 E 3909934 N

to closure at starting point

269326 E 3907440 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF67>TP07DE94.067

BILLING CODE 4310-55-P

NM-CINF-2. From Bureau of Land Management map: Zuni 1981. The perimeter of critical habitat unit NM-CINF-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

728974 E 3927891 N
730469 E 3927412 N
731319 E 3926574 N

following Cibola National Forest boundary southerly and easterly to

737547 E 3919639 N

continuing to

737713 E 3918043 N
737039 E 3916024 N
738179 E 3913675 N
741140 E 3913338 N
743068 E 3912406 N
747071 E 3913198 N
747110 E 3911838 N
748715 E 3911887 N
748753 E 3910272 N
754195 E 3908556 N

755793 E 3909262 N
756029 E 3907016 N
755972 E 3905633 N
757971 E 3904253 N
759443 E 3905854 N
761543 E 3904350 N
763971 E 3903401 N
768690 E 3904567 N
768831 E 3901356 N
769697 E 3901225 N
771958 E 3898737 N
770162 E 3896396 N
768455 E 3896331 N
767401 E 3895562 N
767631 E 3889815 N
769194 E 3889856 N
769249 E 3888120 N
768315 E 3887258 N
767634 E 3886118 N
766290 E 3885614 N
765003 E 3886699 N
764844 E 3889859 N
762154 E 3890301 N
762130 E 3891233 N
760842 E 3892025 N
759634 E 3892161 N
759906 E 3893224 N
758627 E 3893554 N
759127 E 3894586 N
757086 E 3895287 N
757907 E 3896915 N
757051 E 3901217 N
754708 E 3900843 N
753346 E 3898275 N
752083 E 3897586 N
749628 E 3897451 N
749450 E 3900734 N
739960 E 3900426 N
739791 E 3906245 N
742981 E 3906947 N
743214 E 3909884 N
742316 E 3911138 N
736629 E 3911589 N
734257 E 3912786 N
732597 E 3914847 N

731320 E 3917558 N
730252 E 3918038 N
728050 E 3920206 N
726964 E 3923178 N

to closure at starting point

728974 E 3927891 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF68>TP07DE94.068

BILLING CODE 4310-55-C

NM-CINF-3. From Bureau of Land Management map: Zuni 1981. The perimeter of critical habitat unit NM-CINF-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

741674 E 3895631 N
750097 E 3895858 N
751347 E 3895473 N
754515 E 3893272 N
755588 E 3892149 N
758291 E 3890283 N
760271 E 3888114 N
761655 E 3886170 N
760728 E 3882894 N
759754 E 3882525 N
758017 E 3884859 N
754818 E 3886344 N
753147 E 3887953 N
751523 E 3887859 N
751465 E 3889473 N
749876 E 3889450 N
749829 E 3891048 N
748244 E 3891009 N
747938 E 3893039 N
743793 E 3894140 N
741757 E 3894084 N

to closure at starting point

741674 E 3895631 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF69>TP07DE94.069

BILLING CODE 4310-55-C

NM-CINF-4. From Bureau of Land Management map: San Mateo Mountains 1979. The perimeter of critical habitat unit NM-CINF-4 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

277487 E 3750826 N
278003 E 3750825 N
278202 E 3749412 N
277198 E 3747921 N
275136 E 3746291 N
274960 E 3745176 N
273358 E 3743846 N
272467 E 3740707 N
272070 E 3738927 N
272935 E 3738505 N
274450 E 3738540 N
275429 E 3736926 N
277026 E 3736109 N
279648 E 3733057 N
280220 E 3731477 N
280137 E 3729540 N
283585 E 3729268 N
283911 E 3727113 N
282322 E 3724246 N

following Apache Kid wilderness boundary westerly to

270219 E 3720992 N

continuing to

269298 E 3720142 N
267574 E 3723956 N
266064 E 3733236 N
262781 E 3741144 N

259877 E 3743089 N
261233 E 3746107 N
262062 E 3748742 N
260034 E 3750784 N
259227 E 3751102 N
258894 E 3752069 N
259032 E 3754491 N
260106 E 3755089 N
264778 E 3755516 N
268202 E 3754948 N

following Withington Wilderness boundary southerly and easterly, to closure at starting point

277487 E 3750826 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF70>TP07DE94.070

BILLING CODE 4310-55-C

NM-CINF-5. From Bureau of Land Management maps: Magdalena 1979, San Mateo Mountains 1979. The perimeter of critical habitat unit NM-CINF-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

301747 E 3773333 N
302462 E 3770993 N
301025 E 3769355 N
302839 E 3766911 N
303779 E 3765083 N
306367 E 3764416 N
307201 E 3762127 N
304596 E 3755771 N
300851 E 3752634 N
296381 E 3752724 N
296032 E 3753282 N
297100 E 3755450 N
296653 E 3757275 N
297016 E 3758929 N
297305 E 3761699 N
294423 E 3762335 N

293683 E 3765310 N
293895 E 3766995 N
293727 E 3768551 N
292689 E 3768732 N
292445 E 3769879 N
293796 E 3770377 N
296675 E 3770103 N
298481 E 3770627 N
298544 E 3773204 N

to closure at starting point

301747 E 3773333 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF71>TP07DE94.071

BILLING CODE 4310-55-C

NM-CINF-6. From Bureau of Land Management map: Magdalena 1979. The perimeter of critical habitat unit NM-CINF-6 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

233694 E 3789333 N
231361 E 3789378 N
230246 E 3792072 N
230191 E 3793928 N
228111 E 3795850 N
227890 E 3796455 N
227488 E 3800764 N
226900 E 3804399 N
230102 E 3804345 N
232389 E 3802189 N
234826 E 3802487 N
239668 E 3800886 N
241299 E 3800580 N
242381 E 3799348 N
241238 E 3797601 N
240974 E 3795652 N
240372 E 3794166 N
237069 E 3794485 N
235299 E 3791225 N

to closure at starting point

233694 E 3789333 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF72>TP07DE94.072

BILLING CODE 4310-55-C

NM-CINF-7. From Bureau of Land Management maps: Magdalena 1979, Quemado 1983. The perimeter of critical habitat unit NM-CINF-7 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

232448 E 3786183 N
230360 E 3785133 N
229997 E 3783775 N
231743 E 3780822 N
229360 E 3778238 N

following U.S. Forest Service boundary westerly within the following Zone 12 coordinates to

776732 E 3778451 N

continuing to

775665 E 3778404 N
775543 E 3783187 N
776562 E 3784232 N

continuing within the following Zone 13 coordinates

225252 E 3786042 N
226623 E 3788271 N
226405 E 3789318 N
227373 E 3790904 N
227724 E 3792466 N
228789 E 3793102 N
229298 E 3791309 N
229993 E 3789838 N
231006 E 3788742 N

232187 E 3787061 N

to closure at starting point

232448 E 3786183 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF73>TP07DE94.073

BILLING CODE 4310-55-C

NM-CINF-8. From Bureau of Land Management map: Belen 1979. The perimeter of critical habitat unit NM-CINF-8 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

372294 E 3852417 N
374560 E 3850733 N
373057 E 3848633 N
372867 E 3846596 N
374025 E 3844989 N
374048 E 3837030 N
373117 E 3830960 N
371652 E 3830349 N
368404 E 3823949 N
366889 E 3825215 N

following Manzano Mountain Wilderness boundary northerly, to closure at starting point

372294 E 3852417 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF74>TP07DE94.074

BILLING CODE 4310-55-C

NM-GINF-1. From Bureau of Land Management map: Truth or Consequences 1979. The perimeter of critical habitat unit NM-GINF-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

227246 E 3692991 N
226036 E 3693436 N
224741 E 3695314 N
223084 E 3696187 N
222426 E 3697234 N
221696 E 3697888 N
221075 E 3700545 N
221153 E 3702403 N
222967 E 3701587 N
224762 E 3701753 N
227142 E 3704031 N
227975 E 3703849 N
228246 E 3702923 N
230609 E 3700973 N
231127 E 3701219 N
233320 E 3701083 N
234824 E 3701658 N
235970 E 3700071 N
239278 E 3699484 N
239845 E 3697340 N
239212 E 3696908 N
237899 E 3697158 N
238480 E 3695744 N
237056 E 3695148 N
237418 E 3687585 N

following Aldo Leopold Wilderness boundary westerly, to closure at starting point

227246 E 3692991 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF75>TP07DE94.075

BILLING CODE 4310-55-C

NM-GINF-2. From Bureau of Land Management map: Truth or Consequences 1979; U.S. Geological Survey map: Hatch 1982. The perimeter of critical habitat unit NM-GINF-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

243674 E 3648731 N

243840 E 3642951 N
242907 E 3639333 N
240692 E 3635006 N
238397 E 3637045 N
234280 E 3642720 N
231963 E 3647861 N
228470 E 3653582 N
228805 E 3654839 N
229631 E 3656014 N
226906 E 3657161 N
226043 E 3661310 N

following Aldo Leopold Wilderness boundary easterly and southerly, to closure at starting point

243674 E 3648731 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF76>TP07DE94.076

BILLING CODE 4310-55-C

NM-GINF-3. From Bureau of Land Management map: Silver City 1978; U.S. Geological Survey map: Mogollon Mountains 1985. The perimeter of critical habitat unit NM-GINF-3 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

756670 E 3656420 N
759557 E 3655742 N
760033 E 3657581 N
761454 E 3656483 N
762784 E 3657818 N
763467 E 3656815 N
764773 E 3657807 N
766662 E 3657511 N
767681 E 3656891 N
767427 E 3655643 N
770132 E 3653646 N
769811 E 3651229 N
770949 E 3649029 N
773181 E 3647939 N
773366 E 3642021 N

767591 E 3641092 N
761688 E 3641426 N
759088 E 3642713 N
758312 E 3644755 N
748259 E 3652313 N
748561 E 3655206 N

following Gila Wilderness boundary northerly, to closure at starting point

756670 E 3656420 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF77>TP07DE94.077

BILLING CODE 4310-55-C

NM-GINF-4. From Bureau of Land Management map: Tularosa Mountains 1983; U.S. Geological Survey map: Mogollon Mountains 1985. The perimeter of critical habitat unit NM-GINF-4 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

710738 E 3693704 N
707492 E 3694401 N
707147 E 3695974 N
708298 E 3696601 N
707882 E 3698481 N
708830 E 3699576 N
707626 E 3701634 N
709634 E 3702785 N
707437 E 3704115 N
708437 E 3705741 N
707830 E 3707389 N
708799 E 3709723 N
716198 E 3712868 N
720041 E 3712826 N
720685 E 3714349 N
720602 E 3715469 N
725393 E 3715575 N
725064 E 3725226 N
723469 E 3725197 N
718303 E 3728267 N

718166 E 3735009 N
719511 E 3735193 N
720912 E 3734640 N
722565 E 3734690 N
722441 E 3738685 N
726410 E 3738767 N
726312 E 3742799 N
727869 E 3745094 N
729419 E 3745166 N
729337 E 3748321 N
730884 E 3749948 N
733505 E 3749986 N
736049 E 3749684 N
737270 E 3748486 N
739939 E 3748862 N
741644 E 3747936 N
743642 E 3747242 N
742368 E 3745341 N
742148 E 3744049 N
740541 E 3744043 N
738977 E 3742407 N
742311 E 3739237 N
743907 E 3739257 N
745577 E 3737680 N
745598 E 3737126 N
744040 E 3735441 N
744250 E 3726363 N
741163 E 3724669 N
737809 E 3727859 N
737763 E 3729485 N
739298 E 3731149 N
740920 E 3731168 N
742523 E 3732800 N
743149 E 3734428 N
742493 E 3735182 N
741834 E 3734799 N
739589 E 3734371 N
737671 E 3734344 N
737706 E 3732736 N
729838 E 3726016 N
729842 E 3724410 N
731483 E 3722863 N
730894 E 3721686 N
730202 E 3720748 N
730414 E 3719559 N

728542 E 3718160 N
730190 E 3717580 N
731982 E 3717864 N
731796 E 3716429 N
731989 E 3714661 N
730523 E 3712337 N
728691 E 3713118 N
727278 E 3711891 N
728205 E 3711469 N
728194 E 3709063 N
726768 E 3706664 N
725549 E 3705332 N
726937 E 3704935 N
731666 E 3704432 N
731527 E 3702470 N
731961 E 3699879 N

following Gila Wilderness boundary, to closure at starting point

710738 E 3693704 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF78>TP07DE94.078

BILLING CODE 4310-55-C

NM-GINF-5. From Bureau of Land Management maps: Tularosa Mountains 1983, Nutrioso 1981. The perimeter of critical habitat unit NM-GINF-5 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

680687 E 3751224 N
681588 E 3751457 N
683085 E 3750838 N
683915 E 3747375 N
684288 E 3745256 N
685471 E 3743719 N
686281 E 3742097 N
686355 E 3738872 N
691943 E 3738957 N
691881 E 3740525 N
692678 E 3740510 N

692660 E 3742122 N
694267 E 3742162 N
694249 E 3743306 N
696187 E 3743906 N
697882 E 3743923 N
699475 E 3744723 N
700308 E 3744747 N
701905 E 3745616 N
701838 E 3747997 N
698628 E 3747911 N
698592 E 3750374 N
700151 E 3752193 N
700159 E 3752946 N
703344 E 3752960 N
703394 E 3750484 N
706624 E 3750565 N
706649 E 3749371 N
708887 E 3749430 N
709534 E 3749610 N
710366 E 3750942 N
709837 E 3752155 N
709930 E 3754040 N
713873 E 3754237 N
714660 E 3754953 N
714595 E 3755833 N
716102 E 3755947 N
717947 E 3753626 N
718022 E 3751231 N
714117 E 3751122 N
714169 E 3749548 N
713317 E 3749528 N
713352 E 3747161 N
711747 E 3747122 N
711747 E 3746300 N
706718 E 3746180 N
706759 E 3744096 N
704235 E 3744048 N
702863 E 3740782 N
700304 E 3739559 N
696009 E 3735892 N
696099 E 3731074 N
694513 E 3729451 N
692903 E 3729394 N
692941 E 3727789 N
691336 E 3727756 N

691407 E 3724553 N
689835 E 3724521 N
684080 E 3720000 N

following Apache National Forest/Blue Ridge Primitive Area boundary northerly and westerly to

681230 E 3721161 N

following Arizona/New Mexico state line northerly to
681051 E 3731419 N

continuing to

682068 E 3732668 N
682306 E 3734452 N
681013 E 3733458 N

following Arizona/New Mexico state line northerly to

680944 E 3737931 N

continuing to

681864 E 3740897 N
680858 E 3742988 N

following Arizona/New Mexico state line northerly to closure at starting point

680687 E 3751224 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF79>TP07DE94.079

BILLING CODE 4310-55-C

NM-GINF-6. From Bureau of Land Management map: Tularosa Mountains 1983. The perimeter of critical habitat unit NM-GINF-6 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

720925 E 3760853 N

724210 E 3757733 N
724311 E 3756135 N
722797 E 3754495 N
717979 E 3754400 N
717877 E 3756004 N
716236 E 3757559 N
716159 E 3759973 N
718598 E 3760013 N
720045 E 3760846 N

to closure at starting point

720925 E 3760853 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF80>TP07DE94.080

BILLING CODE 4310-55-C

NM-GINF-7. From Bureau of Land Management maps: Tularosa Mountains 1983, Quemado 1983. The perimeter of critical habitat unit NM-GINF-7 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

738241 E 3780533 N
737952 E 3778690 N
738926 E 3776213 N
737534 E 3775620 N
736520 E 3775778 N
734828 E 3775662 N
734037 E 3775006 N
733723 E 3773516 N
732788 E 3772320 N
731868 E 3772300 N
731845 E 3773902 N
731600 E 3775079 N
729716 E 3773572 N
730266 E 3771527 N
731945 E 3769867 N
734188 E 3768856 N
736661 E 3768903 N
738398 E 3770989 N

738545 E 3772114 N
739905 E 3774114 N
742935 E 3774918 N
742877 E 3772818 N
746031 E 3772568 N
745867 E 3773829 N
747508 E 3774341 N
749603 E 3774138 N
750584 E 3773590 N
751811 E 3772291 N
752654 E 3772010 N
755481 E 3767732 N
755636 E 3765608 N
749795 E 3765645 N
749835 E 3764703 N
745770 E 3764534 N
745752 E 3765153 N
745632 E 3765388 N
744860 E 3766116 N
742852 E 3766230 N
740090 E 3765997 N
736136 E 3765204 N
736163 E 3764316 N
732899 E 3764342 N
732895 E 3765124 N
731496 E 3765935 N
728823 E 3769574 N
727510 E 3768996 N
726528 E 3769320 N
727372 E 3770224 N
725318 E 3770476 N
722499 E 3770582 N
721357 E 3771515 N
717195 E 3768959 N
716272 E 3769035 N
715046 E 3768753 N
714289 E 3769502 N
712720 E 3769645 N
710681 E 3768741 N
709377 E 3769391 N
709687 E 3773619 N
711909 E 3775857 N
713558 E 3776052 N
715070 E 3775933 N
716865 E 3775968 N

717817 E 3775839 N
718331 E 3774749 N
717917 E 3773789 N
716686 E 3772780 N
717203 E 3771225 N
719147 E 3773505 N
720704 E 3775125 N
723073 E 3774193 N
728826 E 3777485 N
731039 E 3777549 N
736299 E 3778663 N
736285 E 3780237 N

to closure at starting point

738241 E 3780533 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF81>TP07DE94.081

BILLING CODE 4310-55-C

NM-GINF-8. From Bureau of Land Management map: Quemado 1983. The perimeter of critical habitat unit NM-GINF-8 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

699349 E 3769883 N
701397 E 3767767 N
699843 E 3765989 N
699866 E 3764900 N
697231 E 3765840 N
695747 E 3766003 N
694401 E 3767557 N
695492 E 3769729 N
697764 E 3768661 N
698582 E 3769866 N

to closure at starting point

699349 E 3769883 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF82>TP07DE94.082

BILLING CODE 4310-55-C

NM-GINF-9. From Bureau of Land Management maps: Tularosa Mountains 1983, Nutrioso 1981, Springerville 1981, Quemado 1983. The perimeter of critical habitat unit NM-GINF-9 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

680425 E 3765075 N
681995 E 3766076 N
683665 E 3766926 N
686614 E 3767174 N
689171 E 3765921 N
688920 E 3763755 N
686612 E 3762719 N
685582 E 3761303 N
684328 E 3759560 N
682991 E 3760022 N
680539 E 3759491 N

following Arizona/New Mexico state line northerly, to closure at starting point

680425 E 3765075 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF83>TP07DE94.083

BILLING CODE 4310-55-C

NM-GINF-10. From Bureau of Land Management map: Tularosa Mountains 1983; U.S. Geological Survey map: Mogollon Mountains 1985. The perimeter of critical habitat unit NM-GINF-10 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

750246 E 3697436 N
748558 E 3698004 N
747824 E 3701836 N
746485 E 3703842 N

749650 E 3707137 N
749617 E 3708753 N
747969 E 3710319 N
746737 E 3710563 N
745435 E 3710450 N
743455 E 3712177 N
740609 E 3712851 N
738290 E 3712431 N
736947 E 3714722 N
735538 E 3716268 N
735835 E 3717416 N
734950 E 3718094 N
734862 E 3719708 N
738013 E 3721371 N
746264 E 3713497 N
748789 E 3713528 N
750382 E 3711943 N
752742 E 3711985 N
754394 E 3710407 N
756004 E 3710430 N
756068 E 3708178 N
752878 E 3703669 N
752241 E 3700230 N
753552 E 3700770 N
753320 E 3699139 N
755501 E 3699209 N
758405 E 3700696 N
760153 E 3701219 N
761559 E 3699810 N
760589 E 3698782 N

following Gila Wilderness boundary westerly, to closure at starting point

750246 E 3697436 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF84>TP07DE94.084

BILLING CODE 4310-55-C

NM-GINF-11. From Bureau of Land Management map: Quemado 1983.

The perimeter of critical habitat unit NM-GINF-11 is delineated by the following Universal Transverse Mercator (Zone 12) coordinates:

737598 E 3788618 N
739320 E 3787807 N
740304 E 3786918 N
740335 E 3785728 N
739398 E 3785610 N
739136 E 3784674 N
738126 E 3782980 N
736428 E 3781994 N
734832 E 3783540 N
732466 E 3785217 N
731678 E 3788124 N
737598 E 3788618 N

to closure at starting point

737598 E 3788618 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF85>TP07DE94.085

BILLING CODE 4310-55-C

NM-JAIR-1. From Bureau of Land Management map: Chama 1981; U.S. Geological Survey map: Navajo Reservoir 1980. The perimeter of critical habitat unit NM-JAIR-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

323436 E 4096510 N
323285 E 4092583 N
322301 E 4091584 N
319396 E 4091929 N
317373 E 4091275 N
319853 E 4090475 N
319627 E 4085437 N
316075 E 4082792 N
313056 E 4083780 N
312482 E 4086353 N
313238 E 4088098 N
312969 E 4089153 N

310604 E 4089019 N
310861 E 4090180 N
308563 E 4092661 N
308532 E 4094605 N
306325 E 4094215 N
305004 E 4095589 N
305014 E 4096922 N

following New Mexico/Colorado state line easterly, to closure at starting point

323436 E 4096510 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF86>TP07DE94.086

BILLING CODE 4310-55-C

NM-JAIR-2. From Bureau of Land Management map: Chama 1981; U.S. Geological Survey map: Navajo Reservoir 1980. The perimeter of critical habitat unit NM-JAIR-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

322376 E 4086554 N
324865 E 4082920 N
328355 E 4078560 N
329398 E 4076124 N
328989 E 4075236 N
327413 E 4074516 N
327345 E 4073330 N
326229 E 4072162 N
324415 E 4074125 N
324261 E 4076165 N
324780 E 4077386 N
323364 E 4076578 N
322624 E 4073173 N
321838 E 4072409 N
321454 E 4068884 N
319077 E 4069437 N
317828 E 4071971 N
318127 E 4073381 N
319002 E 4074018 N

321666 E 4073171 N
321902 E 4074363 N
318953 E 4075990 N
319229 E 4077280 N
321004 E 4078572 N
322018 E 4077646 N
323173 E 4079464 N
321801 E 4081240 N
321854 E 4084214 N
321542 E 4084884 N

to closure at starting point

322376 E 4086554 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF87>TP07DE94.087

BILLING CODE 4310-55-C

NM-JAIR-3. From Bureau of Land Management map: Chama 1981. The perimeter of critical habitat unit NM-JAIR-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

335667 E 4073457 N
338132 E 4072853 N
339514 E 4069419 N
339603 E 4067557 N
335143 E 4062658 N
337882 E 4062197 N
340622 E 4060353 N
341258 E 4057555 N
339561 E 4056358 N
338133 E 4054106 N
335377 E 4053224 N
336526 E 4052345 N
340834 E 4054923 N
342209 E 4050785 N
340748 E 4048959 N
337860 E 4047289 N
338489 E 4045735 N
337405 E 4044841 N

335857 E 4047521 N
334780 E 4051863 N
335100 E 4060490 N
333554 E 4065934 N
332703 E 4070652 N
332794 E 4072700 N

to closure at starting point

335667 E 4073457 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF88>TP07DE94.088

BILLING CODE 4310-55-C

NM-JAIR-4. From Bureau of Land Management map: Chama 1981. The perimeter of critical habitat unit NM-JAIR-4 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

324398 E 4067152 N
326882 E 4064967 N
328061 E 4061159 N
328251 E 4057390 N
327436 E 4054823 N
326501 E 4055210 N
325787 E 4056796 N
325106 E 4057286 N
324238 E 4059464 N
324457 E 4061826 N
324887 E 4062416 N
323464 E 4063674 N
322348 E 4065939 N

to closure at starting point

324398 E 4067152 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF89>TP07DE94.089

BILLING CODE 4310-55-C

NM-JAIR-5. From Bureau of Land Management map: Chama 1981. The perimeter of critical habitat unit NM-JAIR-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

325983 E 4043299 N
325799 E 4047542 N
327027 E 4048951 N
328681 E 4049732 N
329458 E 4047895 N
330693 E 4043974 N
328974 E 4043226 N

following U.S. Forest Service/Jicarilla Apache Indian Reservation boundary westerly, to closure at starting point

325983 E 4043299 N

BILLING CODE 4310-55-P

BILLING CODE 4310-55-C

<GRAPHIC><TIF90>TP07DE94.090

BILLING CODE 4310-55-C

NM-LINF-5. From Bureau of Land Management maps: Carrizozo 1981, Ruidoso 1984. The perimeter of critical habitat unit NM-LINF-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

429929 E 3707361 N
430974 E 3706475 N
433146 E 3705055 N
435712 E 3702881 N
435586 E 3701025 N
433906 E 3701017 N
432420 E 3700796 N
432425 E 3701372 N
432056 E 3701390 N
432044 E 3701611 N

430880 E 3701585 N
430334 E 3700912 N
429208 E 3700196 N
425056 E 3700219 N

following White Mountain Wilderness boundary northerly, to closure at starting point

429929 E 3707361 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF91>TP07DE94.091

BILLING CODE 4310-55-C

NM-LINF-6. From Bureau of Land Management map: Ruidoso 1984. The perimeter of critical habitat unit NM-LINF-6 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

435588 E 3697059 N
435085 E 3693876 N
435440 E 3693042 N
434048 E 3693027 N
433038 E 3691438 N
434424 E 3689097 N
433884 E 3686390 N
434055 E 3685107 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary westerly and northerly to

430970 E 3694616 N

continuing to

429148 E 3696049 N

following White Mountain Wilderness boundary easterly, to closure at starting point

435588 E 3697058 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF92>TP07DE94.092

BILLING CODE 4310-55-C

NM-LINF-7. From Bureau of Land Management map: Ruidoso 1984. The perimeter of critical habitat unit NM-LINF-7 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

444627 E 3694587 N
444963 E 3692463 N
443884 E 3689886 N
442220 E 3690011 N
440841 E 3692170 N

following U.S. Forest Service boundary northerly and easterly, to closure at starting point

444627 E 3694587 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF93>TP07DE94.093

BILLING CODE 4310-55-C

NM-LINF-8. From Bureau of Land Management map: Ruidoso 1984. The perimeter of critical habitat unit NM-LINF-8 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

441208 E 3685087 N
442610 E 3686696 N
446208 E 3686789 N
449781 E 3685793 N
449873 E 3685085 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary westerly, to closure at starting point

441208 E 3685087 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF94>TP07DE94.094

BILLING CODE 4310-55-C

NM-LINF-9. From Bureau of Land Management map: Ruidoso 1984. The perimeter of critical habitat unit NM-LINF-9 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

422885 E 3661841 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary southerly to

422696 E 3656656 N

continuing to

420674 E 3657841 N
420976 E 3662334 N
422042 E 3661924 N

to closure at starting point

422885 E 3661841 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF95>TP07DE94.095

BILLING CODE 4310-55-C

NM-LINF-10. From Bureau of Land Management map: Alamagordo 1979. The perimeter of critical habitat unit NM-LINF-10 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

423475 E 3651777 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary easterly to

459692 E 3651601 N

continuing to

461238 E 3650529 N
459711 E 3649235 N
459339 E 3646933 N
457665 E 3646778 N
457298 E 3644819 N
454473 E 3640133 N
452673 E 3642274 N
449968 E 3643695 N
449121 E 3642361 N
447266 E 3643085 N
444068 E 3643547 N
450137 E 3640358 N
449297 E 3640058 N
449241 E 3638014 N
448839 E 3636791 N
446556 E 3636596 N
443734 E 3634233 N
443568 E 3632653 N
445952 E 3633902 N
447566 E 3633670 N
448700 E 3634027 N
449527 E 3633605 N
449138 E 3632139 N
441637 E 3628906 N
441611 E 3625625 N
442344 E 3627004 N
445558 E 3627554 N
448788 E 3627177 N
450818 E 3625979 N
452113 E 3624673 N
450622 E 3622950 N
449195 E 3622371 N
447536 E 3622937 N
448043 E 3621640 N
446317 E 3620595 N
444497 E 3619223 N
442757 E 3619314 N
443018 E 3618537 N
446011 E 3616952 N
450423 E 3617450 N
452394 E 3616127 N

454239 E 3614523 N
454026 E 3610388 N
452510 E 3609246 N
449762 E 3608801 N
448193 E 3610370 N
447280 E 3609998 N
442616 E 3610564 N
438867 E 3612224 N
437084 E 3615801 N
441386 E 3617711 N
440897 E 3618846 N
436049 E 3618073 N
434167 E 3615969 N
430432 E 3615405 N
429333 E 3616347 N
428683 E 3618072 N
424170 E 3623783 N
420554 E 3623508 N
417063 E 3624014 N
417057 E 3627961 N
420091 E 3630901 N
421962 E 3631091 N
424111 E 3631806 N
422738 E 3635103 N
423224 E 3636754 N
423290 E 3639799 N
424699 E 3641183 N
426539 E 3642238 N
426450 E 3643673 N
425958 E 3646416 N
426230 E 3647258 N
424492 E 3647829 N
424652 E 3649071 N
426230 E 3649495 N
426863 E 3650524 N
422683 E 3650656 N

to closure at starting point

423475 E 3651777 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF96>TP07DE94.096

BILLING CODE 4310-55-C

NM-MAIR-1. From Bureau of Land Management map: Ruidoso 1984. The perimeter of critical habitat unit NM-MAIR-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

423475 E 3651777 N
424955 E 3654104 N
424848 E 3655529 N
422696 E 3656656 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary northerly to

422885 E 3661841 N

continuing to

424202 E 3660687 N
425893 E 3662066 N
425631 E 3663475 N
425669 E 3666138 N
426481 E 3667018 N
429954 E 3666677 N
430590 E 3667196 N
431262 E 3669899 N
427795 E 3669957 N
426624 E 3671110 N
426240 E 3672465 N
428451 E 3673174 N
429195 E 3674841 N
428353 E 3676009 N
427882 E 3677105 N
429472 E 3678047 N
429117 E 3680642 N
428269 E 3683322 N
427038 E 3684005 N
427902 E 3687915 N
426579 E 3690960 N
427965 E 3691830 N
430375 E 3692539 N
430970 E 3694616 N

following U.S. Forest Service/Mescalero Apache Indian Reservation

boundary easterly and southerly to

434055 E 3685107 N

continuing to

434166 E 3684978 N
432867 E 3683321 N
432376 E 3680891 N
432542 E 3677404 N
436620 E 3679464 N
435800 E 3681693 N
438435 E 3683245 N
440379 E 3685094 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary easterly to

449873 E 3685085 N

continuing to

450001 E 3684260 N
451634 E 3683321 N
453093 E 3682248 N
451492 E 3680951 N
448324 E 3681060 N
445815 E 3679056 N
446413 E 3678282 N
446653 E 3677275 N
443824 E 3676930 N
443580 E 3675114 N
443522 E 3671062 N
444585 E 3670120 N
446091 E 3670304 N
447125 E 3668941 N
445351 E 3667907 N
442492 E 3665497 N
441720 E 3664362 N
441942 E 3662561 N
442367 E 3661186 N
442792 E 3663243 N
443910 E 3664087 N
445304 E 3663992 N
447718 E 3662651 N

450237 E 3661696 N
452182 E 3659566 N
454540 E 3659338 N
453332 E 3658390 N
450734 E 3658204 N
448531 E 3659303 N
446359 E 3661380 N
444703 E 3659917 N
442839 E 3660200 N
446649 E 3657316 N
443076 E 3653919 N
448276 E 3656734 N
450382 E 3656263 N
455950 E 3654129 N
459692 E 3651601 N

following U.S. Forest Service/Mescalero Apache Indian Reservation boundary westerly, to closure at starting point

423475 E 3651777 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF97>TP07DE94.097

BILLING CODE 4310-55-C

NM-SFNF-1. From Bureau of Land Management maps: Taos 1983, Santa Fe 1983. The perimeter of critical habitat unit NM-SFNF-1 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

459603 E 3989359 N
462162 E 3988055 N
462144 E 3984108 N
457879 E 3984125 N
458067 E 3983618 N
459215 E 3983451 N
459164 E 3981963 N
459673 E 3981967 N
459659 E 3981383 N
460011 E 3981385 N
459996 E 3980709 N

459026 E 3981163 N
458732 E 3981865 N

following Pecos Wilderness boundary westerly and northerly to

456533 E 3987490 N

to closure at starting point

459603 E 3989359 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF98>TP07DE94.098

BILLING CODE 4310-55-C

NM-SFNF-2. From Bureau of Land Management map: Santa Fe 1983. The perimeter of critical habitat unit NM-SFNF-2 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

462127 E 3974981 N
464563 E 3974959 N
466567 E 3973709 N
466063 E 3970997 N
462056 E 3970885 N

to closure at starting point

462127 E 3974981 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF99>TP07DE94.099

BILLING CODE 4310-55-C

NM-SFNF-3. From Bureau of Land Management map: Santa Fe 1983. The perimeter of critical habitat unit NM-SFNF-3 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

456445 E 3970895 N
457360 E 3970528 N
458681 E 3969999 N
459601 E 3968938 N
460655 E 3966447 N
461569 E 3962796 N
461820 E 3960922 N
461894 E 3960248 N

following Pecos Wilderness boundary northerly, to closure at
starting point

456445 E 3970895 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF100>TP07DE94.100

BILLING CODE 4310-55-C

NM-SFNF-4. From Bureau of Land Management map: Santa Fe 1983.
The perimeter of critical habitat unit NM-SFNF-4 is delineated by
the following Universal Transverse Mercator (Zone 13) coordinates:

444193 E 3965889 N

following Pecos Wilderness boundary southerly and easterly to

461671 E 3953630 N

continuing to

461666 E 3950170 N
461395 E 3947425 N
459509 E 3945370 N
456780 E 3945429 N
456519 E 3940320 N
455236 E 3940408 N
456289 E 3938296 N
456492 E 3935847 N
455776 E 3934488 N
455870 E 3929148 N
452280 E 3929151 N

450396 E 3933165 N
450506 E 3934669 N
448260 E 3936999 N
448187 E 3938622 N
448400 E 3942233 N
444696 E 3943422 N
442971 E 3945914 N
442145 E 3947831 N
442373 E 3951765 N
444116 E 3955610 N
440937 E 3957180 N
440955 E 3960372 N

to closure at starting point

444193 E 3965889 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF101>TP07DE94.101

BILLING CODE 4310-55-C

NM-SFNF-5. From Bureau of Land Management map: Santa Fe 1983. The perimeter of critical habitat unit NM-SFNF-5 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

438049 E 3958179 N
438026 E 3955857 N
437554 E 3954428 N
436913 E 3948217 N
437959 E 3943008 N
433147 E 3942270 N
431736 E 3940769 N
426569 E 3940772 N
425310 E 3941242 N
423774 E 3940930 N
422185 E 3943518 N
422404 E 3946295 N

following Santa Fe Municipal Watershed/Pecos Wilderness boundary to

435933 E 3958807 N

continuing to

436122 E 3959657 N
437016 E 3959087 N

to closure at starting point

438049 E 3958179 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF102>TP07DE94.102

BILLING CODE 4310-55-C

NM-SFNF-6. From Bureau of Land Management map: Santa Fe 1983. The perimeter of critical habitat unit NM-SFNF-6 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

421058 E 3968395 N

following Pecos Wilderness boundary easterly and southerly to

425846 E 3963983 N

continuing to

425025 E 3962800 N
425291 E 3956951 N
424011 E 3956371 N
423884 E 3955312 N
422882 E 3954722 N
420997 E 3955637 N
421373 E 3957394 N
422252 E 3957819 N
422258 E 3959262 N
420178 E 3959646 N
420740 E 3960649 N
421723 E 3961569 N
420726 E 3963577 N
421022 E 3964846 N

to closure at starting point

421058 E 3968395 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF103>TP07DE94.103

BILLING CODE 4310-55-C

NM-SFNF-7. From Bureau of Land Management map: Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-7 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

373822 E 3980211 N

following Santa Fe National Forest/Santa Clara Indian Reservation boundary easterly to

379741 E 3979230 N

continuing to

381422 E 3979281 N
386072 E 3976487 N
386062 E 3975492 N
379724 E 3975496 N
378810 E 3975759 N
377143 E 3975463 N
379338 E 3971675 N
379315 E 3971092 N
378553 E 3971091 N
377564 E 3969510 N
375216 E 3969855 N
373753 E 3971408 N
375342 E 3971410 N
375940 E 3971821 N
375944 E 3972674 N
373740 E 3973632 N

following Santa Fe National Forest/Baca Location No. 1 Grant boundary northerly, to closure at starting point

373822 E 3980211 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF104>TP07DE94.104

BILLING CODE 4310-55-C

NM-SFNF-8. From Bureau of Land Management map: Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-8 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

371967 E 3965563 N

following Bandelier National Monument boundary southerly and easterly to

377425 E 3960094 N

following Dome Wilderness boundary westerly and southerly to

374067 E 3953600 N

continuing to

372933 E 3951339 N
356407 E 3951624 N
356428 E 3952818 N
358775 E 3954869 N
360779 E 3955821 N
362179 E 3959973 N
361994 E 3961214 N
362397 E 3962785 N
363925 E 3962884 N
364990 E 3964827 N
366629 E 3965635 N

to closure at starting point

371967 E 3965563 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF105>TP07DE94.105

BILLING CODE 4310-55-C

NM-SFNF-9. From Bureau of Land Management map: Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-9 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

352407 E 3965890 N
354489 E 3965123 N
355170 E 3963834 N
354200 E 3963366 N
357978 E 3960920 N
358700 E 3957484 N
355076 E 3958282 N
353902 E 3956822 N
353630 E 3955830 N
352431 E 3953923 N
352080 E 3952612 N
351070 E 3951418 N
346676 E 3952764 N
348666 E 3958781 N
350815 E 3962126 N
350849 E 3964641 N

to closure at starting point

352407 E 3965890 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF106>TP07DE94.106

BILLING CODE 4310-55-C

NM-SFNF-10. From Bureau of Land Management map: Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-10 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

348601 E 3971406 N
350172 E 3970354 N
351036 E 3967837 N
346306 E 3964081 N
346134 E 3961345 N

344273 E 3957215 N
344347 E 3955388 N
343184 E 3953453 N
339295 E 3959028 N
339565 E 3964179 N
339064 E 3966633 N
342542 E 3969957 N
344794 E 3971258 N

to closure at starting point

348601 E 3971406 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF107>TP07DE94.107

BILLING CODE 4310-55-C

NM-SFNF-11. From Bureau of Land Management map: Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-11 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

332430 E 3964437 N
332438 E 3969669 N
333142 E 3971403 N
332379 E 3974766 N
331671 E 3975740 N
332036 E 3977725 N
335626 E 3978324 N
337059 E 3974907 N
336626 E 3972508 N
334537 E 3968898 N
337684 E 3965647 N
336016 E 3964131 N
336078 E 3962858 N
337358 E 3960544 N
339022 E 3955454 N
337494 E 3954499 N
333755 E 3954709 N
332510 E 3955822 N

following Santa Fe National Forest/Jemez Indian Reservation boundary

northerly, to closure at starting point

332430 E 3964437 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF108>TP07DE94.108

BILLING CODE 4310-55-C

NM-SFNF-12. From Bureau of Land Management maps: Abiquiu 1978, Los Alamos 1978. The perimeter of critical habitat unit NM-SFNF-12 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

353953 E 3985893 N

following U.S. Forest Service/Baca Location No. 1 Grant boundary southerly to

353818 E 3979872 N

continuing to

352581 E 3977606 N
351926 E 3974146 N
345202 E 3972184 N
346644 E 3977227 N
345503 E 3976667 N
344060 E 3972939 N
338456 E 3969063 N
338310 E 3973729 N
337844 E 3975558 N
338987 E 3977882 N
339142 E 3980135 N
339034 E 3982328 N
338767 E 3984240 N
340292 E 3984786 N
343772 E 3984633 N
346581 E 3984921 N
347105 E 3987275 N
350042 E 3989050 N

to closure at starting point

353953 E 3985893 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF109>TP07DE94.109

BILLING CODE 4310-55-C

NM-SFNF-13. From Bureau of Land Management map: Abiquiu 1978. The perimeter of critical habitat unit NM-SFNF-13 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

371342 E 4001383 N
372449 E 3995952 N
372142 E 3993336 N
372449 E 3988079 N
371526 E 3987450 N
368993 E 3990010 N
368382 E 3988581 N
367593 E 3989136 N
367906 E 3987505 N
365884 E 3986333 N
363511 E 3987299 N
362271 E 3985991 N
361290 E 3987104 N
361050 E 3989047 N
360334 E 3992260 N
361286 E 3995038 N
364082 E 3996761 N
364928 E 3997946 N
364831 E 3998643 N
366275 E 3999321 N
368808 E 3999435 N
369924 E 4001017 N

to closure at starting point

371342 E 4001383 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF110>TP07DE94.110

BILLING CODE 4310-55-C

NM-SFNF-14. From Bureau of Land Management map: Abiquiu 1978. The perimeter of critical habitat unit NM-SFNF-14 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

378726 E 3984709 N
376371 E 3985234 N
377685 E 3986851 N
380428 E 3987616 N
380563 E 3991340 N
382072 E 3991166 N
382420 E 3990122 N
383310 E 3991142 N
384521 E 3991933 N
385712 E 3991823 N
388341 E 3988416 N
388025 E 3987010 N

following U.S. Forest Service/Santa Clara Indian Reservation boundary westerly, to closure at starting point

378726 E 3984709 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF111>TP07DE94.111

BILLING CODE 4310-55-C

NM-SFNF-15. From Bureau of Land Management map: Abiquiu 1978. The perimeter of critical habitat unit NM-SFNF-15 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

340251 E 4028608 N

following Chama River Canyon Wilderness boundary southerly to

351903 E 4009458 N

continuing to

350806 E 4009713 N
345939 E 4010277 N
343275 E 4010345 N
343649 E 4011748 N
342204 E 4011395 N
341903 E 4013893 N
343458 E 4016580 N
344289 E 4020894 N
343171 E 4022755 N
340253 E 4025887 N
339283 E 4026458 N

to closure at starting point

340251 E 4028608 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF112>TP07DE94.112

BILLING CODE 4310-55-C

NM-SFNF-16. From Bureau of Land Management maps: Abiquiu 1978, Chama 1981. The perimeter of critical habitat unit NM-SFNF-16 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

340889 E 4041655 N
345585 E 4041565 N

following U.S. Forest Service boundary southerly to

349070 E 4036697 N

following Chama River Wilderness boundary southerly and westerly to

340785 E 4031637 N
340638 E 4031640 N

to closure at starting point

340889 E 4041655 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF113>TP07DE94.113

BILLING CODE 4310-55-C

NM-SFNF-17. From Bureau of Land Management maps: Abiquiu 1978, Chama 1981. The perimeter of critical habitat unit NM-SFNF-17 is delineated by the following Universal Transverse Mercator (Zone 13) coordinates:

328974 E 4043226 N
331420 E 4040209 N
332662 E 4036576 N
333170 E 4034120 N
332259 E 4029926 N
330852 E 4029054 N
324367 E 4035344 N
325697 E 4036137 N
326952 E 4037970 N
326061 E 4038902 N
325983 E 4043299 N

following U.S. Forest Service/Jicarilla Apache Indian Reservation easterly, to closure at starting point

328974 E 4043226 N

BILLING CODE 4310-55-P

<GRAPHIC><TIF114>TP07DE94.114

<GRAPHIC><TIF115>TP07DE94.115

BILLING CODE 4310-55-C

UT-MSNF-1. From Bureau of Land Management map: Blanding 1982. The perimeter of critical habitat unit UT-MSNF-1 is delineated by

the following Universal Transverse Mercator (Zone 12) coordinates:

621439 E 4200435 N
622314 E 4199301 N
623701 E 4198888 N
625079 E 4197744 N
627118 E 4197410 N
625844 E 4195697 N
626996 E 4192033 N
626435 E 4189502 N
625861 E 4187782 N
624243 E 4188297 N
623399 E 4187344 N
622298 E 4185223 N
620721 E 4183487 N
621302 E 4180499 N
620910 E 4177949 N
616077 E 4177849 N
616180 E 4171434 N
616844 E 4171415 N
616857 E 4170502 N
610320 E 4170848 N
611014 E 4166074 N
611924 E 4164697 N
612099 E 4162720 N
605809 E 4162619 N
605872 E 4159395 N
605337 E 4159386 N
603392 E 4160665 N
603182 E 4163247 N
602208 E 4164482 N
601057 E 4164878 N
598690 E 4165350 N
596915 E 4164080 N
596178 E 4164008 N
596115 E 4167284 N
594552 E 4167301 N
594508 E 4170508 N

following Manti-La Sal National Forest/Bureau of Land Management boundary westerly to

593215 E 4171192 N

following Manti-La Sal National Forest/Dark Canyon Wilderness Area

boundary to

598399 E 4190933 N

following Manti-La Sal National Forest boundary northerly and easterly, to closure at starting point

621439 E 4200435 N

Primary constituent elements: Mexican spotted owl habitat that includes, but is not limited to, those habitat components providing or with the potential to provide for nesting, roosting, foraging, or dispersal. Forested habitats used for nesting and roosting are characterized as supporting mature stand attributes including high canopy closure, multi-layered canopies, coniferous vegetation (sometimes including a hardwood understory), large diameter trees, high densities of live trees, snags and large logs. Canyon habitats are steep-walled structures with rocky outcrops and crevices; vegetation is generally sparse, but may be relatvely important in the canyon bottoms. Nesting and roosting habitat also supports owl foraging activity; however, a wider array of habitat attributes may be found in areas used solely for foraging, including fairly open and non-contiguous forest, small openings, woodland, and rocky slopes.

Dated: November 29, 1994.
George T. Frampton, Jr.,
Assistant Secretary for Fish and Wildlife and Parks.
[FR Doc. 94-30000 Filed 12-2-94; 12:58 pm]
BILLING CODE 4310-55-P